

santa clara county

# behavioral risk factor Survey 2000

a report summarizing health behaviors of adults

Santa Clara County

Public Health Department

Santa Clara Valley Health & Hospital System



released august 2002

# special thanks

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# letter from the director and health officer

*Dedicated to the Health  
of the Whole Community*



**Administration**  
3003 Moorpark Avenue  
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Dear Colleagues and Community Members,

The Public Health Department is pleased to present the results of the second Santa Clara County Behavior Risk Factor Survey (BRFS) conducted among adults age 18 and over. The mission of the Public Health Department is to serve all people of Santa Clara County by protecting health; preventing disease, injury, premature death and disability; promoting healthy lifestyles, behaviors and environments; and responding to disasters, disease outbreaks and epidemics. To fulfill this mission, the Public Health Department must continuously monitor the health status of the community and communicate findings to the public at-large. This survey is one of the ways we monitor health status.

Individual behavior is the largest contributing factor to actual health outcomes, followed by human biology, environment, and healthcare access factors. The BRFS is a Centers for Disease Control and Prevention survey that addresses multiple behaviors that are known to contribute either positively or negatively to the health of adults. With the administration of the Year 2000 survey, the Department conducted several analyses, that uncovered health disparities within the Santa Clara County adult population.

These analyses have been conducted to both describe the frequency of behavioral risk factors in the population and reveal relationships among different behavioral risk factors and across different demographic characteristics. It is our hope that the information will serve to heighten awareness about important health issues and to assist organizations in focusing action to address those issues. The full report can be accessed on the Public Health Department's website at [www.sccphd.org](http://www.sccphd.org) and used as a planning tool for organizations and community groups.

Sincerely,

A handwritten signature in black ink, appearing to read "Guadalupe Olivas".

Guadalupe S. Olivas, PhD  
Director, Public Health Department

A handwritten signature in black ink, appearing to read "Martin Fenstersheib MD".

Martin Fenstersheib, MD, MPH  
Health Officer, Santa Clara County

# executive summary

## **The Report**

The Santa Clara County Behavioral Risk Factor Survey (BRFS) Report, issued by the Santa Clara County Public Health Department, identifies multiple risk behaviors known to influence the health status of adults. The results of the survey will be used to develop or improve action plans to reduce illness, promote health, diminish health disparities and enhance the quality of life for the residents of Santa Clara County.

The Santa Clara County Behavioral Risk Factor Survey compares data to the Healthy People 2010 (U.S. Department of Health and Human Services, January 2000) national health objectives, which has the overarching purpose of promoting health and preventing illness, disability and premature deaths. The national health objectives were created to identify the most significant preventable threats, establish goals to reduce these threats, eliminate health disparities and increase the quality and years of healthy living. Together, both reports establish health objectives and serve to develop local and state health improvement plans.

The Santa Clara County Behavioral Risk Factor Survey was conducted in 2000 by telephone to over 2,500 residents of Santa Clara County, 18 years of age and older. For a complete description of the survey methodology, please go to the Methodology section of this report (pages 16 to 19).

The Santa Clara County Behavioral Risk Factor Survey evaluates local determinants of health data. These determinants of risk behaviors can lead to unhealthy outcomes and health disparities across different demographic groups. Health topics focused on in this report include a broad spectrum of determinants, such as health care coverage and access, general health and well-being, chronic diseases, women's health, and injury and violence. For a complete list of health topics covered, please refer to the Introduction section on page 15.

Data presented in this report is used to determine the extent of unhealthy behaviors derived from personal practices and inadequate/lack of information or access of available services.

## **Key Findings**

The data presented in this report was used to determine how characteristics and behavioral practices between groups compared with each other and to relevant Healthy People 2010 objectives. Additionally, the survey was used to understand the extent of health problems affected by unhealthy behavioral practices, whether these practices were the result of personal characteristics or inadequate or lack of access to services. The information was reviewed to see if these practices then led to unhealthy outcomes and health disparities across different groups.

# executive summary

## **Populations with Health Disparities:**

Throughout the survey, consistent patterns of health disparities were observed. The most dramatic health disparities were found among (1) females, (2) Hispanics, (3) young adults age 18 to 24, and (4) those with low incomes. These groups reported higher proportions of health problems, risk behaviors and a diminished ability to access the health care system.

### **Females**

In general, more females considered themselves to be in poor physical and mental health, and had higher prevalence of obesity, arthritis, asthma, and high blood pressure than males. Females also reported significantly higher rates of visiting a healthcare provider and were at lower risk for drinking and smoking compared to males.

Although the prevalence of breast cancer (mammograms or clinical breast exams) and cervical cancer (Pap smear test) screening nearly met the Healthy People 2010 objectives, birth control use was substantially low among females in Santa Clara County. In addition, only half of females of childbearing age consumed folic acid, which was well below the Healthy People 2010 target of 80%.

Females in this survey were also more subjected to intimate partner violence and sexual assault than males.

### **Hispanics**

Hispanics generally perceived themselves to be in poor physical and mental health. The Hispanic population also suffered higher prevalence of binge and chronic alcohol consumption and tobacco use.

Although Hispanics reported higher rates of testing smoke detectors for proper function as a preventive measure against personal injury, fewer Hispanics reported practicing other preventive practices, such as breast cancer screening, cervical cancer screening, condom use, and consumption of folic acid. Hispanics also had significantly lower prevalence of having healthcare coverage, dental coverage, and visiting a doctor or other healthcare providers (due to high costs), thereby missed opportunities for outreach services and education offered by many healthcare settings. Of the Hispanics who were able to access healthcare providers, significantly more received injury prevention education on smoke detectors, bicycle helmets, and seat belts.



# executive summary

## **Young Adults**

Many young adults surveyed, mostly in the 18 to 24 age group, considered themselves to be in fair or poor health. More young adults reported being subjected to intimate partner violence, and did not practice preventive measures, such as smoking cessation and folic acid consumption. Higher proportions of young adults received personal injury prevention education for bicycle helmet use, seat belt use, and smoke detectors from their healthcare providers. Although more young adults received education on the importance of periodically testing smoke detectors, significantly fewer young adults reported testing smoke detectors for proper operation.

Like Hispanics, young adults also reported significantly lower prevalence of having healthcare coverage, dental coverage, and visiting a doctor or other healthcare providers (due to high costs), thereby missed opportunities for outreach services and education offered by many healthcare settings.

## **Low Income Individuals**

Like all other groups identified as having health disparities, low income individuals perceived themselves to be in fair or poor health, but they lacked the ability to seek healthcare due to high costs of medical services and lack of health insurance and dental coverage. Consequently, missed opportunities of receiving preventive education from health providers may have contributed to more respondents in lower income levels to report lower prevalence of cervical cancer screening tests, folic acid consumption, and receiving education on personal injury prevention topics, such as smoke detectors, bicycle helmets, and seat belts. Furthermore, significantly higher proportions of low-income adults reported smoking.

## **Priority Health Topic Areas:**

Of the 21 health topic areas covered in this report, five were identified as priority areas that programs could focus on due to increased prevalence, extent of inadequate health practices, and disparities from the Healthy People 2010 objectives. These topic areas included (1) healthcare coverage and doctor visits, (2) chronic and binge alcohol consumption, (3) overweight and obesity, (4) women's health practices (folic acid consumption and family planning), and (5) intimate partner violence (IPV). All populations with observed health disparities also overlapped with these priority health topics.

## **Healthcare Coverage and Doctor Visits**

The Healthy People 2010 goal for healthcare coverage is 100%, suggesting that all Santa Clara County residents should have access to the healthcare system, whether by a public or private provider. Results from this survey found that not all adults in the county had coverage. Groups that reported significantly lower healthcare coverage than other populations included Hispanics, young adults (18 to 24 years old), and those with low income.

# executive summary

Significantly fewer Hispanic respondents reported having a health plan, receiving health insurance from an employer, and having one, consistent primary care practitioner. Moreover, greater proportions of Hispanics were covered by Medi-Cal and did not have healthcare coverage during the year prior to the survey interview.

Young adults were more likely to depend on other family members for coverage. In light of this finding, it could be deduced that young adults may have still been in school or employed where health coverage is not offered as a benefit.

Fewer respondents in lower income levels reported having healthcare coverage, and many were not able to access healthcare due to high costs. Although some respondents who fell under the Federal Poverty Level were employed, not all jobs generally offer healthcare benefits or pay adequate salaries that support the purchase of private health insurance. Paying for healthcare costs can be prohibitive when there are already limited funds for other necessities, such as housing, food, and clothing.

Seeing a doctor or healthcare provider on a routine basis increases the chances of screening for various types of chronic and debilitating illnesses that can be prevented by early diagnosis and detection. Although more than half of the respondents saw a doctor within the past 12 months, about 5.3% could not see a doctor because of high costs. Results from this survey indicated that Santa Clara County has lowered this barrier against seeing a doctor since the last BRFSS was conducted in 1997, and has been advancing more so with this issue than the rest of the state and nation. However, disparities existed among those of Hispanic origin, in younger age groups, with fewer years of education, in lower income levels, and among those who did not have health insurance.

## **Chronic and Binge Alcohol Consumption**

Drinking, on the whole, was prevalent among men, Whites, and among people with higher income and education. However, the prevalence of acute drinking was higher among Hispanics, men, younger adults, and individuals with lower income and education.

In general, chronic and binge alcohol use is associated with a wide range of concerns, including high blood pressure, trauma, motor vehicle collisions, accidents, intimate partner violence, cancer, fetal alcohol syndrome, and mental health problems (Fleming, 1998). Hence, interventions that focus on reducing alcohol consumption that exceed recommended limits are key to reducing the prevalence of associated negative health concerns.

# executive summary

## **Overweight and Obesity**

Overweight and/or obesity can occur across all populations. In the United States, obesity has reached epidemic proportions. In Santa Clara County, over 51% of adults were either overweight or obese at the time the survey was conducted. More males were at risk for being overweight, whereas more women were at risk for being obese. Lower educational status was a significant factor in determining the risk for being obese or overweight. Former smokers were also at an increased risk for being overweight or obese.

Results from the survey revealed that arthritis, asthma, high blood pressure, and diabetes were more likely to occur in respondents who were above a healthy body weight. This correlated with the well documented finding that being overweight or obese has a direct impact on chronic disease conditions. Though chronic diseases generally do not appear until middle age or later, having a body weight above normal during younger years can increase the risk for acquiring these diseases. Once chronic diseases are diagnosed, bodyweight reduction is important in reducing and controlling other health problems and impairments associated with these chronic disease conditions. An active lifestyle and a healthy diet are key in achieving and maintaining a healthy weight, which can have direct implications on lowering the burden of disease in a community as well as increasing the quality of life at the individual level.

## **Women's Health Practices – Family Planning and Folic Acid Consumption**

Overall use of birth control methods by non-pregnant women age 18 to 44 in Santa Clara County was far below the national 2010 target. Use of birth control methods was even lower among Asians and Hispanics. Other groups who had lower birth control use were younger women age 18 to 24, unmarried women, and women with less years of education. Interventions that increase family planning education and birth control use are necessary to reduce the prevalence of unintended pregnancies in Santa Clara County.

Folic acid supplementation during pregnancy is very important in preventing birth defects in newborns. Unfortunately, only 50% of female respondents of childbearing age took folic acid supplementation. Folic acid intake was even lower among Hispanics compared with other ethnic groups. Additionally, folic acid intake was disproportionately lower among women less than 25 years of age and with lower income and years of education. The vast majority of the women were unaware about the benefit of folic acid on pregnancy outcome, which needs to be emphasized in education programs in order to increase folic acid intake among all women of childbearing age.

Both birth control use and folic acid intake was lower among female respondents who did not have any routine physical check up, which further emphasizes the importance of promoting health practices in educational programs that address women's health.

# executive summary

## **Intimate Partner Violence (IPV)**

According to the findings from the National Violence Against Women Survey, approximately 1.5 million women and 834,000 men were raped and/or physically assaulted by their intimate partner annually in the nation (CDC 2001). Although the nature of the subject posed some methodological and analytical challenges in this survey, the data presented highlights the prevalence of violence and sexual abuse among residents of Santa Clara County for the first time. Estimates from this survey revealed that about 10% of the respondents experienced violence as a child, saw or heard their parents get hurt, and about 4% were sexually assaulted before their 18<sup>th</sup> birthday. About 2% of respondents were victimized in the year before the BRFS was conducted. Over half of these respondents did not know their relationship to their perpetrator. Less than 1% also reported being physically hurt. Nearly 3% were sexually abused as an adult and about 3% were forced to engage in unwanted sexual activities. Factors that were correlated with history of violence or sexual abuse included being physically and mentally unwell and being unmarried at the time of the survey. Women, younger adults, and White women were more likely to report victimization by an intimate partner.

Although results from this survey present IPV data for the first time, further studies are needed to better understand the context of violence at the individual and community level, the psychological consequences, and long-term effects, in order to plan comprehensive interventions and reduce the prevalence of this significant health issue in Santa Clara County.

## **Recommendations**

Recommendations are made for each of the five priority health topics identified from survey results. Implementing policies, conducting education and awareness activities, and realizing preventive measures can effectively address these determinants of health and reduce the burden of illness, enhance the quality of life and increase longevity of Santa Clara County residents. For a complete listing of recommendations cited by expert sources, please go to the Recommendations section of this report (pages 252 to 258).

Overall, local government, health organizations, medical providers and community groups can use the results of this report to develop and implement policies, generate action plans, and increase overall awareness to address identified risks and disparities in Santa Clara County.

### **Increase Access to Health Care Coverage**

Recommended efforts to increase access to health care coverage include increasing public awareness about the importance and availability of health care programs; identifying populations with the lowest prevalence of health coverage to include in planning and evaluation outreach and retention efforts; assisting local coalition capacity building efforts to improve coordination and provision of training; and supporting policies that gear health insurance practices to standardize benefit packages and regulate marketing practices.

# executive summary

## Reduce Chronic and Binge Alcohol Consumption

Best practices to reduce the prevalence of chronic and binge alcohol consumption include increasing alcohol screening; promoting responsible marketing of alcohol; increasing awareness of consequences of abusive consumption and responsible drinking; collecting data on alcohol outlet density, permits, advertising, and resources; building coalitions, and identifying high-risk environments.

## Reduce Obesity and Number of Overweight Adults

Interventions suggested by the Office of the Surgeon General to reduce the number of obese and overweight adults are educating communities about the health issues related to being obese or overweight; promoting healthy eating habits and regular physical activity; and improving the understanding of the cause, prevention and treatment of obesity.

## Increase Women's Health Practices: Family Planning & Contraceptive Use

Recommended strategies from the Alan Guttmacher Institute for promoting family planning and contraceptive use include improving outreach and educational efforts on family planning, especially among populations with low prevalence of contraception use and high prevalence of unintended pregnancy, and supporting full contraceptive coverage in private insurance plans.

## Increase Women's Health Practices: Folic Acid Consumption

The Folic Acid Alliance's recommended interventions to increase folic acid consumption among women of childbearing age include conducting community awareness campaigns that are linguistically and culturally appropriate, and encouraging healthcare providers to educate clients on the importance of folic acid and food and vitamin sources high in folic acid.

## Reduce Intimate Partner Violence

Best practice strategies to reduce intimate partner violence include conducting universal screening for violence at hospital and clinical settings; developing a surveillance system that links intimate partner violence cases with hospital, mortality, and other data sources; minimizing risk and increasing awareness on available community resources through education; training healthcare providers and law enforcement in responding to intimate partner violence; improving media coverage of violence; and creating countywide coalitions to focus on planning, implementation, problem-solving, advocacy and evaluation efforts addressing intimate partner violence.

The Santa Clara County Behavioral Risk Factor Survey (BRFS) was initially administered in the fall of 2000 to ascertain the health status of residents in the county by comparison to the Healthy People 2010 National Health Objectives. The 2010 Objectives were created as a prevention agenda for the nation to identify the most significant preventable threats to health and establish national goals to reduce these threats. National health objectives were first established in the 1979 Surgeon General's Report, *Healthy People*, followed by *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. Both reports established health objectives and served as the basis for the development of state and local community health improvement plans.

Since 1984, the Behavioral Risk Factor Surveillance System (BRFSS), which is administered nationally and supported by the Behavioral Surveillance Branch (BSB) of the Centers for Disease Control (CDC), has been an on-going data collection program designed to measure behavioral risk factors in the adult population 18 years of age or older living in households. The objective of the BRFSS is to collect uniform, state-specific data on preventive health practices and risk behaviors that are linked to chronic diseases, injuries, and preventable infectious diseases in the adult population.

In 1997, Santa Clara County initiated its own BRFSS data collection process. Subsequently, the Public Health Department published the Health Status Report (1997) using the Healthy People 2000 national objectives as a platform for action and as a guide for developing plans to improve the health of individuals and communities in the county.

This report will compare BRFS data to the Healthy People 2010 national objectives and their targets, which have the overarching purpose of promoting health and preventing illness, disability, and premature deaths. Two main goals of the Healthy People 2010 national objectives are to (1) increase quality and years of healthy life and (2) eliminate health disparities. The objectives focus on interventions designed to directly or indirectly reduce or eliminate illness, disability, and premature death among individuals and communities.

The national objectives are based on 10 Leading Health Indicators and topic areas, which represent the country's major public health concerns in relation to individual behaviors, physical and social environmental factors, and health system issues. The 10 Leading Health Indicators are: (1) physical activity; (2) overweight and obesity; (3) tobacco use; (4) substance abuse; (5) responsible sexual behavior; (6) mental health; (7) injury and violence; (8) environmental quality; (9) immunization; and (10) access to healthcare. According to the Healthy People 2010 report, individual behaviors and environmental factors are responsible for about 70% of all premature deaths in the United States. Hence, developing and implementing policies and preventive interventions that effectively address these determinants of health can reduce the burden of illness, enhance quality of life, and increase longevity.

The Santa Clara County Behavioral Risk Factor Survey (BRFS) Report 2000 is a product of the Santa Clara County Public Health Department. The results presented in this report will be used as a foundation for developing action plans to meet the objectives posed by Healthy People 2010, in order to achieve the overall goal of reducing illness and promoting health in the County.

This report presents an overview of Santa Clara County's health status by comparing county-level data to determinants of health that are addressed in the Healthy People 2010 report. Of the 28 specific health topic areas described in Healthy People 2010, this report focuses on the following:

- |                                 |  |
|---------------------------------|--|
| 1. Healthcare coverage & access | 12. Pap Smear test                             |
| 2. Perception of health         | 13. Family planning                            |
| 3. Dental/oral health           | 14. Folic acid intake & awareness              |
| 4. Doctor visits                | 15. Sexual behavior                            |
| 5. Overweight/obesity           | 16. HIV/AIDS                                   |
| 6. Arthritis                    | 17. Alcohol use                                |
| 7. Asthma                       | 18. Tobacco use                                |
| 8. Blood pressure               | 19. Firearms                                   |
| 9. Diabetes                     | 20. Intimate partner violence & sexual assault |
| 10. Prostate cancer screening   | 21. Personal injury prevention                 |
| 11. Breast cancer screening     |  |

It is important to note that since adults 18 years and over are the target population in this report, Healthy People 2010 objectives that are geared specifically towards children and adolescents are not included as measures of comparison in this report.

Additionally, a table comparing BRFS results for Santa Clara County (1997 and 2000), California (2000), and the nation (2000) is included in Appendix-A ("Matrix of Outcome Comparison of BRFS results in Santa Clara County, California, and United States") for comparison purposes and is sometimes referred to in health topic sections that show significant differences.

The Santa Clara County Behavioral Risk Factor Survey (BRFS) is a cross-sectional survey of the county population. As a contractor for the Public Health Department, Field Research Corporation conducted data collection for the BRFS 2000 survey in November and December 2000. Interviews were completed with a random sample of 2,547 adults age 18 or older residing in Santa Clara County. Topics covered included health and well being, medical care, health insurance, blood pressure, diabetes, dental health and care, tobacco use, cigar use, asthma, arthritis, preventative health, folic acid, alcohol use, women's health, family planning, prostate cancer, HIV/AIDS, sexual behavior, firearms, and demographics. Two additional modules were included on a test basis: intimate partner violence and sexual assault.

### **Survey Tool**

The survey was conducted using the CATI (Computer Assisted Telephone Interview) methods. The survey questionnaire was adapted from the CDC's Behavioral Risk Factor Survey 2000 (CDC, 2002). The questionnaire was translated into Spanish as well as translated back into English. Before the actual interview, each questionnaire was pre-tested among a group of respondents.

In preparation for interviewing, a detailed training manual was developed. Interviewers attended a day-long training that included lectures on survey protocol, practice interviews with live respondents, and intensive monitoring. Monitoring of interviews continued throughout the survey to ensure high quality data collection.

### **Sampling Design**

The Santa Clara County BRFS employed an unrestricted, list-assisted random digit dial (RDD) sampling methodology to screen for eligible households within Santa Clara County. Samples of random digit dial listings were purchased from a leading supplier of samples to the survey research industry.

Sampling by means of an RDD sample avoids one of the major threats to sampling frame accuracy in telephone surveys. That is, the threat of systematically excluding that portion of the population with unlisted telephone numbers, which is the major source of potential bias in directory or list-based telephone samples. The size of the bias inherent in directory or list-based samples is directly related to the extent to which households within a jurisdiction choose to be unlisted in current directories. In Santa Clara County this problem is particularly acute, with an estimated two-thirds of all households currently not listed in available directories or other available list sources. An RDD sampling approach avoids this potential bias altogether, since it is developed using random digits from all possible 10-digit telephone numbers within operating area codes, exchanges and telephone blocks within the County.

The "next birthday" method was used to randomly select an adult in each household. Overall, this method is considered to produce less bias and non-response than the "household enumeration" approach used in previous BRFS surveys.



### Weighting

To generalize the survey data to the overall County population, it is necessary to develop appropriate sampling weights. These weights adjust for differences in the probability of selection of different types of individuals in each survey population that are attributable to the sampling design, and for different contact and response rates of different sub-populations during the survey process.

Pre-weights were calculated based on the relative probability of selection of a household and an individual within a household. For example, a household with two different telephone lines entering it has twice the probability of being selected as a household with one telephone. Therefore, the weight of a respondent in a two-telephone household must be decreased by a factor of two. A pre-weight was also introduced to adjust for the probability of selecting one adult from different sized households.

The next step in weighting was to adjust the weights so that the weighted number of respondents conforms to known population totals such as age, sex and ethnicity of adults within the County. Variations in interview completions and respondent availability can make the characteristics of the final sample of adults interviewed slightly different from known population characteristics. Also referred to as ratio adjustment, the second stage of weighting attends to these variations.

No weights were applied to household level variables. The unweighted variables include HAVEGUN, HANDGUN, LONGGUN, LOCKED3, LOCKED4, WHYGYN2, GUN-USED, CHILD18, CHILD1-7, CHLDHEL, SMKALAR, INCOM94, THRESH1, THRESH2, OTPH, NUMPHON, NOPH, NOPHM, and ZIPCODE. The procedure for calculating weights follows the documentation set forth in the 1998 BRFS User Guide.

## Statistical Analysis

Data analysis was performed by using SPSS for Windows (Version 11.1). The software PHRATE was used to calculate percent and 95% CI and EPI-Info 2000 was also used to calculate the chi-square for trends.

Both univariate and bivariate analysis were done to compare outcome variables. The proportions of participants with each outcome variable were compared using chi-squared test. For comparing categorical variables among multiple categories, a chi-square for trend was analyzed to examine a dose response relationship. To compare continuous variables between groups, Student's t-test was done for normally distributed data and Mann Whitney U test was performed to compare non-normally distributed data.

To examine the risk factors for various risk behaviors, dummy variables were created assigning 1 (for risk) and 0 (for non-risk) values. Unadjusted Odd ratios (ORs) and 95% confidence intervals (95% CIs) were calculated to examine the association of socioeconomic, demographic, and other predictor variables with certain risk behavior. Finally, a logistic regression model was run to adjust for confounding variables such as socio-demographic variables (age, sex, education, income, marital status, etc.), and other risk behaviors on a particular association of interest (such as odds of smoking for male gender). Adjusted ORs (95% CIs) are presented based upon the logistic regression model.

Level of statistical significance was set at  $P < 0.05$  (two-sided exact significance). For chi-square test, Fisher's exact test F values were used if a cell frequency was less than 5.

## Limitations

The BRFS's method of conducting telephone interviews has several biases that may limit the ability to generalize results to the total population in Santa Clara County. First, those without phones, which may include low income, elderly, and transient individuals were not included. Second, those who did not speak English or Spanish could not be interviewed. Third, those who were too ill could not be interviewed, leading to a biased sampling of healthier individuals than are represented in the population. Lastly, some individuals refused to participate in the phone interview. Since we do not know how these individuals differed from those who participated in the survey, we cannot assess how they would have affected the survey findings.

Further, estimates for certain population subgroups may be based on small numbers (small bases) and have relatively large sampling errors.

**Population Estimates for Santa Clara County, 1993-2000**

Demographic Research Unit  
California Department of Finance

**US Census 2000 Population**

United States Census Bureau  
United States Department of Commerce

**AIDS:** Acquired immunodeficiency syndrome, the most severe phase of infection with the human immunodeficiency virus (HIV). Persons infected with HIV are said to have AIDS when they get certain opportunistic infections or when their CD4+ cell count drops below 200. (U.S. Department of Health and Human Services, January 2000).

**Alcohol Abuse:** A maladaptive pattern of alcohol use that leads to clinically significant impairment or distress, as manifested by one or more of the following occurring within a 12-month period: recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home; recurrent alcohol use in physically hazardous situations; recurrent alcohol-related legal problems; continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol. In the literature on economic costs, alcohol abuse means any cost-generating aspect of alcohol consumption; this definition differs from the clinical use of the term, which involves specific diagnostic outcomes. (U.S. Department of Health and Human Services, January 2000).

**Arthritis and Other Rheumatic Conditions:** More than 100 conditions (or diseases or problems) that primarily affect the joints, muscles, fascia, tendons, bursa, ligaments, and other connective tissues of the body. (Department of Health and Human Services, January 2000).

**Asthma:** A lung disease characterized by airway constriction, mucus secretion, and chronic inflammation, resulting in reduced airflow and wheezing, coughing, chest tightness, and difficulty breathing. (Department of Health and Human Services, January 2000).

**Binge Drinker:** An individual who reports drinking at least 5 alcoholic beverages (any combination of beer, wine, or liquor) on at least one or more occasions within the last month. (U.S. Department of Health and Human Services, January 2000).

**Body Mass Index (BMI):** Weight (in kilograms) divided by the square of height (in meters), or weight (in pounds) divided by the square of height (in inches) times 704.5. Because it is readily calculated, BMI is the measurement of choice as an indicator of healthy weight, overweight, and obesity. (U.S. Department of Health and Human Services, January 2000).

**BRFS:** Behavioral Risk Factor Survey

**Cancer:** A term for diseases in which abnormal cells divide without control. Cancer cells can invade nearby tissue and can spread through the bloodstream and lymphatic system to other parts of the body. (U.S. Department of Health and Human Services, January 2000).

**CBE:** Clinical breast exam

**CDC:** The Centers for Disease Control and Prevention, which is recognized as the lead federal agency for protecting the health and safety of people (at home and abroad), providing credible information to enhance health decisions, and promoting health through strong partnerships. The CDC serves as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and education activities designed to improve the health of the people of the United States. (CDC, 2002).

**CI:** Confidence Interval; The computed interval with a given probability, e.g., 95%, that the true value of a variable such as a mean, proportion, or rate is contained within the interval. (Last et al for the International Epidemiological Association, Inc., 1995)

**Community Health Promotion Program:** Includes all of the following: (1) community participation with representation from at least three of the following community sectors: government, education, business, faith organizations, health care, media, voluntary agencies, and the public, (2) community assessment, guided by a community assessment and planning model, to determine community health problems, resources, perceptions, and priorities for action, (3) targeted and measurable objectives to address at least one of the following: health outcomes, risk factors, public awareness, services, and protection, (4) comprehensive, multifaceted, culturally relevant interventions that have multiple targets for change, and (5) monitoring and evaluation processes to determine whether the objectives are reached. (U.S. Department of Health and Human Services, January 2000).

**Continuum of Care:** The array of health services and care settings that address health promotion, disease prevention, and the diagnosis, treatment, management, and rehabilitation of disease, injury, and disability. Included are primary care and specialized clinical services provided in community and primary care settings, hospitals, trauma centers, and rehabilitation and long-term care facilities. (U.S. Department of Health and Human Services, January 2000).

**Contraception (Birth Control):** The means of pregnancy prevention. Methods include permanent methods (vasectomy for men and tubal ligation for women) and temporary methods (for example, hormonal implant, injectable, birth control pill, emergency contraceptive pills, intrauterine device, diaphragm, female condom, male condom, spermicidal foam/cream/jelly, sponge, cervical cap, abstinence, natural family planning, calendar rhythm, and withdrawal). (U.S. Department of Health and Human Services, January 2000).

**Developmental (Objectives):** Used in the Healthy People 2010 report, developmental objectives provide a vision for a desired outcome or health status. Current national surveillance systems do not provide data on these subjects. The purpose of developmental objectives is to identify areas of emerging importance and to drive the development of data systems to measure them. Most developmental objectives have a potential data source with reasonable expectation of data points by the year 2004 to facilitate setting year 2010 targets in the mid-decade review. Developmental objectives with no baseline at the midcourse will be dropped (U.S. Department of Health and Human Services, January 2000).

**Diabetes (Mellitus):** A chronic disease due to either or both insulin deficiency and resistance to insulin action, and associated with hyperglycemia (elevated blood glucose levels). Over time, without proper preventive treatment, organ complications related to diabetes develop, including heart, nerve, foot, eye, and kidney damage; problems with pregnancy also occur. Diabetes is classified into four major categories:

**Type 1 Diabetes:** (Previously called insulin-dependent diabetes mellitus [IDDM] or juvenile-onset diabetes [JODM]) represents clinically about 5 percent of all persons with diagnosed diabetes. Its clinical onset is typically at ages under 30 years. Most often this type of diabetes represents an autoimmune destructive disease in beta (insulin-producing) cells of the pancreas in genetically susceptible individuals. Insulin therapy always is required to sustain life and maintain diabetes control.

**Type 2 Diabetes:** (Previously called non-insulin-dependent diabetes mellitus [NIDDM] or adult-onset diabetes [AODM]) is the most common form of diabetes in the United States and the world, especially in certain racial and ethnic groups and in elderly persons. In the United States, approximately 95 percent of all persons with diagnosed diabetes (estimated 10.5 million) and almost 100 percent of all persons with undiagnosed (estimated 5.5 million) diabetes probably have type 2 diabetes.

**Gestational Diabetes Mellitus (GDM):** Refers to the development of hyperglycemia during pregnancy in an individual not previously known to have diabetes. Approximately 3 percent of all pregnancies are associated with GDM. GDM identifies health risks to the fetus and newborn and future diabetes in the mother and offspring.

**Other types:** Include genetic abnormalities, pancreatic diseases, and medication use.

(U.S. Department of Health and Human Services, January 2000).

**DHHS:** U.S. Department of Health and Human Services

**Disability:** General term used to represent the interactions between individuals with a health condition and barriers in their environment. The term disability is operationalized as self-reported activity limitations or use of assistive devices or equipment related to an activity limitation. (U.S. Department of Health and Human Services, January 2000).

**End Stage Renal Disease (ESRD):** Occurs when the kidneys' entire filtration system breaks down and the kidneys fail to function. ESRD is a condition in which the patient requires dialysis or a kidney transplant in order to live. (American Diabetes Association website, n.d.)

**Family Planning:** The process of establishing the preferred number and spacing of one's children, selecting the means to achieve the goals, and effectively using these means. (U.S. Department of Health and Human Services, January 2000).

**Federal Poverty Level (FPL):** In February of each year, the Federal Government releases an official income level for poverty called the Federal Poverty Guidelines, and often informally referred to as the "Federal Poverty Level". The benefit levels of many low-income assistance programs are based on these poverty figures. The Santa Clara County Public Health Department used the 1999 Department of Health and Human Services Poverty Guidelines to describe the 100% Federal Poverty Level. Multiplying the numbers by 2 provided the 200% Federal Poverty Level Guidelines.

**1999 HHS Poverty Guidelines**

Size of Family Unit	48 Contiguous States & D.C.	Alaska	Hawaii
1	\$ 8,240	\$ 10,320	\$ 9,490
2	\$ 11,060	\$ 13,840	\$ 12,730
3	\$ 13,880	\$ 17,360	\$ 15,970
4	\$ 16,700	\$ 20,880	\$ 19,210
5	\$ 19,520	\$ 24,400	\$ 22,450
6	\$ 22,340	\$ 27,920	\$ 25,690
7	\$ 25,160	\$ 31,440	\$ 28,930
8	\$ 27,980	\$ 34,960	\$ 32,170
For each additional person, add:	\$ 2,820	\$ 3,520	\$ 3,240

(Federal Register, March 1999, as cited by the U.S. Department of Health and Human Services website, n.d.)

**Gingivitis:** An inflammatory condition of the gum tissue, which can appear reddened and swollen and frequently bleeds easily. (U.S. Department of Health and Human Services, January 2000).

**Health:** A state of physical, mental, and social well-being and not merely the absence of disease and infirmity. (World Health Organization, 2002).

**Healthcare Coverage:** Refers to the type of healthcare coverage (whether paid by public or private sector) of those individuals who report only one type of healthcare coverage, or the healthcare coverage used to pay most of the cost of medical care among those individuals who reported that they had more than one plan. Healthcare coverage is what an individual uses to cover most of the cost of medical care. It also includes referral or linkage to assure access to health service. (U.S. Department of Health and Human Services, January 2000).

**HCP** – Healthcare Provider

**Health Education:** Any planned combination of learning experiences designed to predispose, enable, and reinforce voluntary behavior conducive to health in individuals, groups, or communities. (U.S. Department of Health and Human Services, January 2000).

**Health Insurance:** Any type of third party payment, reimbursement, or financial coverage for an agreed-upon set of healthcare services. Includes private insurance obtained through employment or purchased directly by the consumer, or health insurance provided through publicly funded programs, including Medicare, Medicaid, CHAMPUS/CHAMPVA, or other public hospital or physician programs. (U.S. Department of Health and Human Services, January 2000).

**Health Promotion:** Any planned combination of educational, political, regulatory, and organizational supports for actions and conditions of living conducive to the health of individuals, groups, or communities. (U.S. Department of Health and Human Services, January 2000).

**Healthy People 2000 and Healthy People 2010 Objectives:** The Healthy People Year 2000 (Y2000) and Healthy People Year 2010 (Y2010) Objectives are a national set of benchmarks developed by a consortium of groups in association with the US Department of Health and Human Services. Objectives were developed for some special populations based on baseline national statistics. (U.S. Department of Health and Human Services, January 2000). On a cautionary note, since the racial/ethnic composition of Santa Clara County is different than the US, both Y2000 and Y2010 objectives may not always provide appropriate measures for our county. Not all indicators presented in this report were compared to Y2000 or Y2010 objectives; a number of indicators did not have a corresponding objective; and/or the comparison was not appropriate for the population that was presented. (U.S. Department of Health and Human Services, January 2000).



**Healthy Weight:** Defined as a Body Mass Index (BMI) equal to or greater than 18.5 and less than 25. (U.S. Department of Health and Human Services, January 2000).

**Heart Disease:** The leading cause of death and a common cause of illness and disability in the United States. Coronary heart disease and ischemic heart disease are specific names for the principal form of heart disease, which is the result of atherosclerosis, or the buildup of cholesterol deposits in the coronary arteries that feed the heart. (U.S. Department of Health and Human Services, January 2000).

**High Blood Pressure (Hypertension):** A systolic blood pressure of 140 mmHg or greater or a diastolic pressure of 90 mmHg or greater. With high blood pressure, the heart has to work harder, resulting in an increased risk of a heart attack, stroke, heart failure, kidney and eye problems, and peripheral vascular disease. (U.S. Department of Health and Human Services, January 2000).

**HIV (Human Immunodeficiency Virus):** A virus that infects and takes over certain cells of the immune system that are important in fighting disease. (U.S. Department of Health and Human Services, January 2000).

**Human Papilloma Virus (HPV):** A disease caused by the human papilloma virus characterized by a soft wart-like growth on the genitalia (for example penis, vulva). In adults this infection is most commonly transmitted sexually. Genital warts are very common and are increasing in incidence. (U.S. Department of Health and Human Services, January 2000).

**Injury:** Unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical, or chemical energy or from the absence of such essentials as heat or oxygen. (U.S. Department of Health and Human Services, January 2000).

**Intimate Partner(s):** Refers to spouses, ex-spouses, boyfriends, girlfriends, and former boyfriends and girlfriends (includes same-sex partners). Intimate partners may or may not be cohabitating and need not be engaging in sexual activities. (U.S. Department of Health and Human Services, January 2000).

**Intimate Partner Violence:** Actual or threatened physical or sexual violence or psychological and emotional abuse by an intimate partner. (U.S. Department of Health and Human Services, January 2000). Actual or threatened physical or sexual violence, or psychological/emotional abuse by a spouse, ex-spouse, boyfriend/girlfriend, ex-boyfriend/ex-girlfriend, or date (CDC, 2001).

**Leading Health Indicators (in Healthy People 2010):** The Leading Health Indicators are used to measure the health of the Nation over the next years until 2010. Each of the 10 Leading Health Indicators has one or more objectives from Healthy People 2010 associated with it. As a group, the Leading Health Indicators reflect the major health concerns in the United States at the beginning of the 21st century. The Leading Health Indicators were selected on the basis of their ability to motivate action, the availability of data to measure progress, and their importance as public health issues. The Leading Health Indicators are: physical activity; overweight and obesity; tobacco use; substance abuse; responsible sexual behavior; mental health; injury and violence; environmental quality; immunization; and access to healthcare. (U.S. Department of Health and Human Services, January 2000).

**Low Income:** Low income is defined by the Healthy People Year 2000 Objectives as annual family income less than \$10,000 or annual family income less than \$20,000 depending on the objective. This concept is different from the threshold poverty level established by the federal government that takes into account the size of the family when examining income. Neither definition of low income adjusts for the cost of living in a particular area. (U.S. Department of Health and Human Services, January 2000).

**Mammogram:** An x-ray of the breast. (U.S. Department of Health and Human Services, January 2000).

**Medi-Cal:** Medi-Cal is California's state Medicaid program, providing healthcare services for low-income families and individuals who lack other health insurance. Medi-Cal is jointly funded by the state and federal governments. It is the primary source of healthcare for many children, elderly, blind, and disabled. (California Department of Health Services, retrieved from website 2002).

**Medicare:** The Centers for Medicare & Medicaid Services (CMS) administers Medicare, the nation's largest health insurance program. Medicare is a health insurance program for people 65 years of age and older, some disabled people under 65 years of age, and people with End-Stage Renal Disease (permanent kidney failure treated with dialysis or a transplant). (Medicare, 2002).

**n.d.:** No date (listed in the Reference section for sources retrieved from the internet with no date indicated).

**Neural tube defects (NTDs):** A set of birth defects that result from failure of the neural tube to close in utero. Two of the most common NTDs are anencephaly (absence of the majority of the brain) and spina bifida (incomplete development of the back and spine). (U.S. Department of Health and Human Services, January 2000).

**Obesity:** A condition characterized by excessive body fat. A Body Mass Index (BMI) of 30 or greater is considered obese. (U.S. Department of Health and Human Services, January 2000).

**Odds Ratio (OR):** In terms of risk-odds, the ratio is the odds in favor of getting the disease, if exposed, to the odds in favor of getting the disease if not exposed. (Last et al for the International Epidemiological Association, Inc., 1995).

**Opportunistic Infections:** Infections that take advantage of the opportunity offered when a person's immune system has been weakened by HIV infection. At least 25 medical conditions, including bacterial, fungal, and viral infections and certain types of cancer, are associated with HIV infection. (U.S. Department of Health and Human Services, January 2000).

**Overweight:** Excess body weight. A Body Mass Index (BMI) between 25 and 29.9 is considered overweight. (U.S. Department of Health and Human Services, January 2000).

**Pap (Papanicolaou) Test:** Microscopic examination of cells collected from the cervix. The Pap test is used to detect cancer, changes in the cervix that may lead to cancer, and noncancerous conditions, such as infection or inflammation. (U.S. Department of Health and Human Services, January 2000).

**Perinatal:** Of, relating to, or being the period around childbirth, especially the five months before and one month after birth. (U.S. Department of Health and Human Services, January 2000).

**Periodontal Disease:** A cluster of diseases caused by bacterial infections and resulting in inflammatory responses and chronic destruction of the soft tissues and bone that support the teeth. Periodontal disease is a broad term encompassing several diseases of the gums and tissues supporting the teeth. (U.S. Department of Health and Human Services, January 2000).

**Poverty:** Using a set of money income thresholds that vary by family size and composition, poverty is defined when a family's total income is less than that family's threshold. Poverty is not defined for people in military barracks, institutional group quarters, or for unrelated individuals under age 15 (such as foster children). (Dalaker & Proctor, 1999, as cited by U.S. Census Bureau, 2000)

**Prevalence:** The number of events, e.g., instances of a given disease or other condition, in a given population at a designated time. (Last et al for the International Epidemiological Association, Inc., 1995)

**Protease Inhibitor:** A drug that binds to and blocks HIV protease from working, thus preventing the production of new functional viral particles. (U.S. Department of Health and Human Services, January 2000).

**Quality of Life:** Quality of life reflects a general sense of happiness and satisfaction with our lives and environment. General quality of life encompasses all aspects of life, including health, recreation, culture, rights, values, beliefs, aspirations, and the conditions that support a life containing these elements. *Health-related quality of life* reflects a personal sense of physical and mental health and the ability to react to factors in the physical and social environments. Health-related quality of life is more subjective than life expectancy and therefore can be more difficult to measure. Some tools have been developed to measure health-related quality of life. (U.S. Department of Health and Human Services, January 2000).

**Race/Ethnicity:** Different categories are used when referring to race or ethnicity. Assumptions regarding these categories change over time in response to greater awareness of the meaning and relevance of race, ethnicity and geographical origin. The following are race/ethnicity categories as recommended by Office of Management and Budget (OMB), however in this report, ethnic groups represented are Whites, Hispanics, Asian/Others, and African Americans:

**American Indian or Alaska Native:** A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

**Asian:** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

**Black, African American:** A person having origins in any of the black racial groups of Africa. Terms such as “Haitian” or “Negro” can be used in addition to “Black or African American”.

**Native Hawaiian or Other Pacific Islander:** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. Categorized under “Asian/other” in this report.

**Hispanic or Latino:** A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term, “Spanish origin,” can be used in addition to “Hispanic or Latino”.

**Other:** Other and refused to state/unknown race.

**White:** A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

(Office of Management and Budget, December, 2000)

**Rape:** Forced sexual intercourse, including both psychological coercion and physical force. Forced sexual intercourse means vaginal, anal, or oral penetration by the offender(s) and includes incidents of penetration by a foreign object. Also included are attempted rapes, male and female victims, and heterosexual and homosexual rape. (U. S. Department of Health and Human Services, January 2000).

**Rate:** The basic measure of disease occurrence that most clearly expresses the probability of risk of disease in a defined population over a specified period of time. A rate is defined as:

$$\frac{\text{Number of events in a specified period}}{\text{Population at risk during that period}}$$

(U.S. Department of Health and Human Services, January 2000).

**Rheumatoid Arthritis:** A chronic, inflammatory disease of the body that produces its most prominent manifestations in joints, often leading to joint pain, stiffness, and deformity. (U.S. Department of Health and Human Services, January 2000).

**SCC:** Santa Clara County

**Secondhand Smoke:** A mixture of the smoke exhaled by smokers and the smoke that comes from the burning end of the tobacco product. (U.S. Department of Health and Human Services, January 2000).

**Sexual Assault:** Unwanted sexual contact or forced sex that includes oral, anal, or vaginal intercourse in situations when threats, physical force, or a weapon was used; also includes situations when a person was unable to give consent due to age, drugs, alcohol, sleep, or mental disability. (U.S. Department of Health and Human Services, January 2000).

**STDs:** Sexually transmitted diseases

**Stroke:** A form of cerebrovascular disease that affects the arteries of the central nervous system. A stroke occurs when blood vessels bringing oxygen and nutrients to the brain burst or become clogged by a blood clot or some other particle. Because of this rupture or blockage, part of the brain does not get the flow of blood it needs. Deprived of oxygen, nerve cells in the affected area of the brain cannot function and die within minutes. When nerve cells cannot function, the part of the body controlled by these cells cannot function either. (U.S. Department of Health and Human Services, January 2000).

**Substance Abuse:** The problematic consumption or illicit use of alcoholic beverages, tobacco products, and drugs, including misuse of prescription drugs. (U.S. Department of Health and Human Services, January 2000).

**Unintended pregnancy:** A general term that includes pregnancies a woman reports as either mistimed or unwanted at the time of conception. If an unintended pregnancy occurs and is carried to term, the birth may be a wanted one, but the pregnancy would be classified as unintended. (U.S. Department of Health and Human Services, January 2000).

**Violence:** The intentional use of physical force or power, threatened or actual, against another person or against oneself or against a group of people, that results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation. (U.S. Department of Health and Human Services, January 2000).

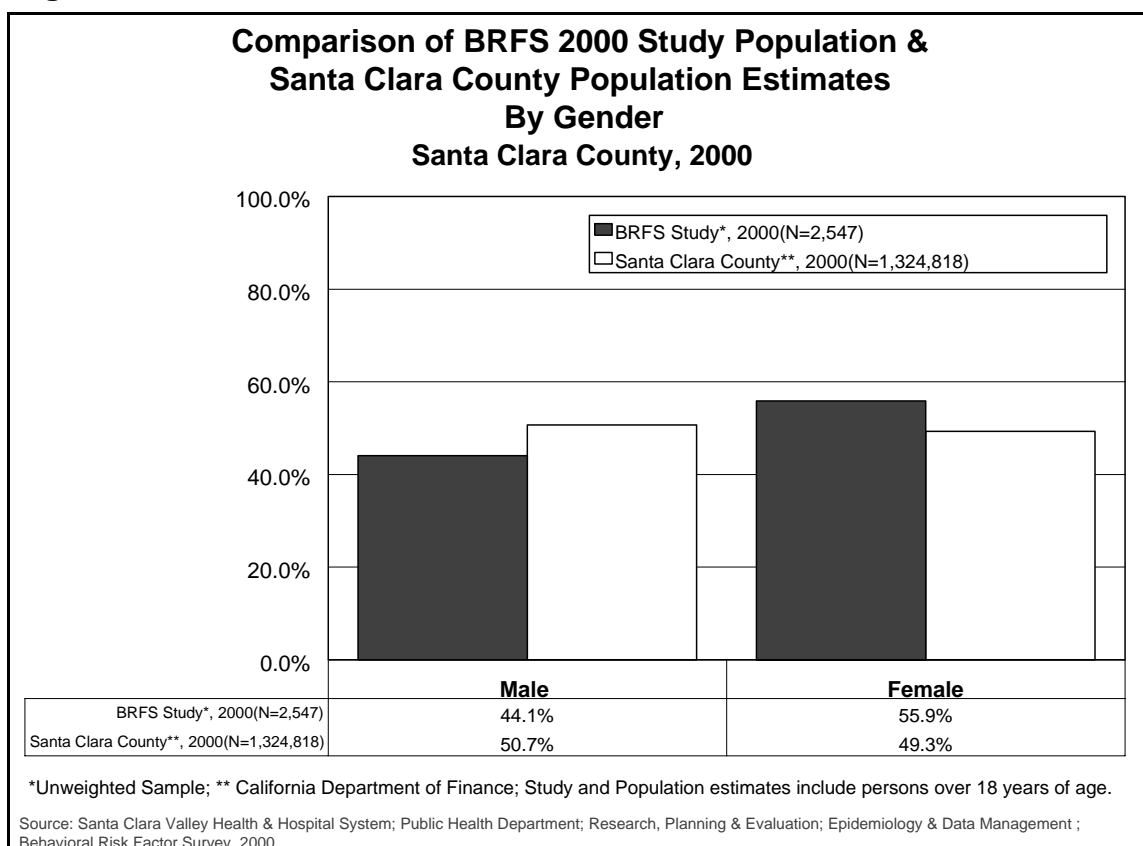
This section provides a demographic profile of the population of Santa Clara County as ascertained by the survey.

## BRFS 2000 Sample Demographics Compared to Santa Clara County

Figures 1 through 3 compare the demographics of participants in the 2000 Santa Clara County BRFS to Santa Clara County population estimates from the California Department of Finance (2000). Since the demographics of the sample population differed, weights were calculated to make the sample more comparable to the population of Santa Clara County. The methodology of the weighting scheme is discussed in the Methodology section.

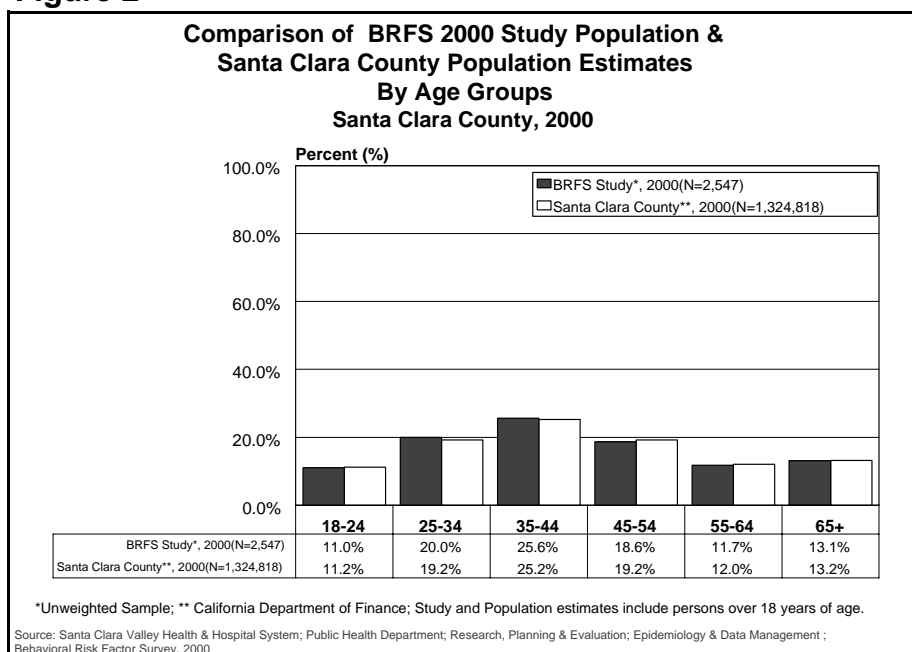
Figure 1 illustrates that gender distribution was not similar between the BRFS respondent population and the general Santa Clara County population described by the California Department of Finance (DOF). The BRFS sample had a significantly lower proportion of men (44.1% vs. 50.7%) and higher proportion of women (55.9% vs. 49.3%) than generally observed among the county residents.

**Figure 1**



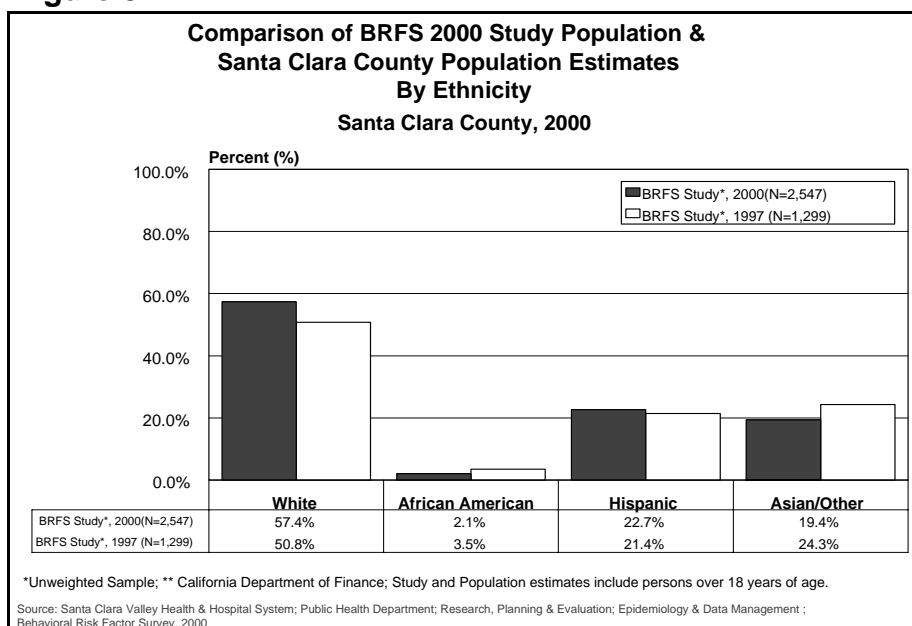
The age distribution between the sample captured in the BRFs 2000 and the county estimates was fairly similar as seen in Figure 2.

**Figure 2**



The 2000 BRFs captured fewer African Americans and Asian/others in the sample compared to their representation in the county (Figure 3). In contrast, the 1997 BRFs sample captured fewer Hispanics and Asian/others than the county population at that time (data not shown).

**Figure 3**



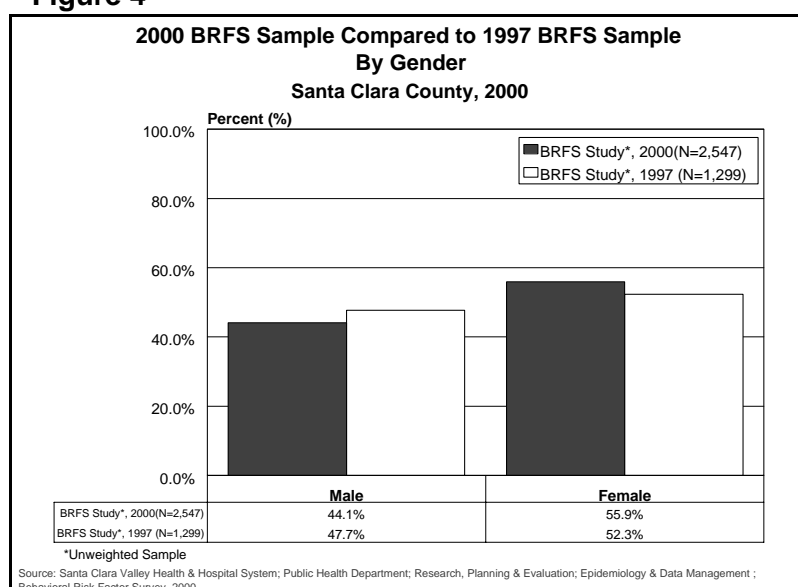


## BRFS 2000 Sample Compared to BRFS 1997 Sample

Figures 4 through 6 compare the demographics of participants in the 2000 Santa Clara County BRFS to the demographics of participants in the 1997 Santa Clara County BRFS. The sample size was almost doubled in 2000 to better represent all ethnic and age groups in the population .

More women than men were captured in the sample population for both the 1997 and 2000 BRFS studies in Santa Clara County.

**Figure 4**



**Figure 5**

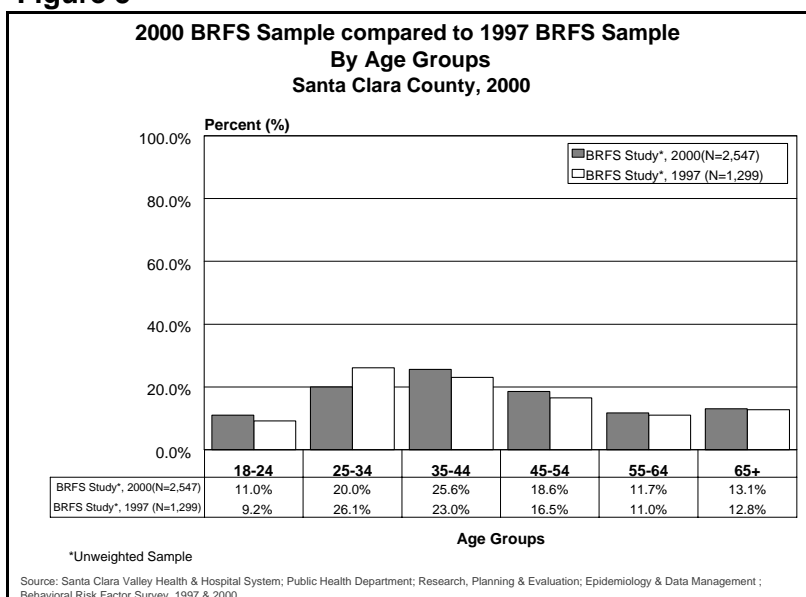
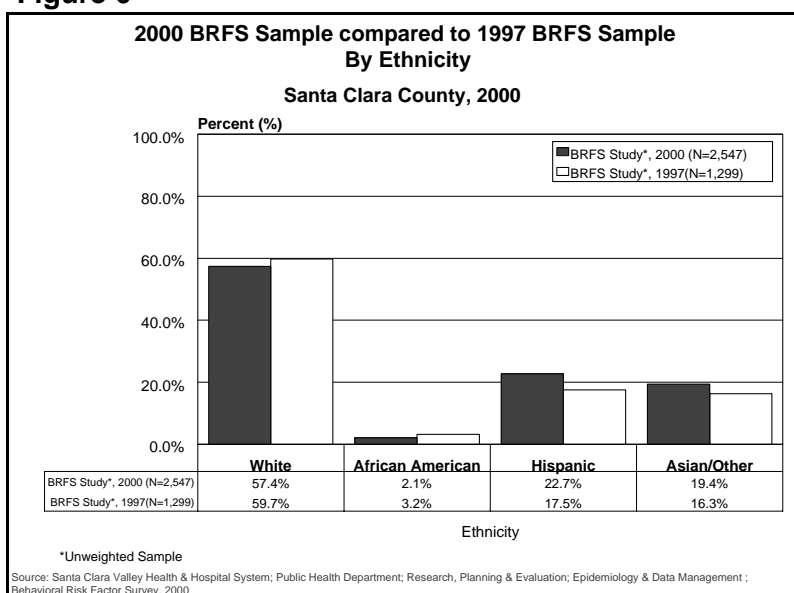


Figure 5 shows that there was a lower representation of individuals between 25 to 34 years in the 2000 sample compared to the sample in 1997. Higher proportions were seen in all other age groups in the 2000 sample compared to the 1997 sample.

The 2000 sample had lower proportion of African Americans and a higher proportion of all other groups, particularly Hispanics, compared to the ethnic distribution in the 1997 sample (Figure 6).

**Figure 6**



The gender distribution within various ethnic groups among BRFs 2000 participants indicated that there was a 3:2 ratio of female to male among all ethnic groups except for Asian/Others. There was an equal representation of males and females among Asian/Others (data not shown).

## Social and Economic Status of the BRFs 2000 Participants

**Figure 7**

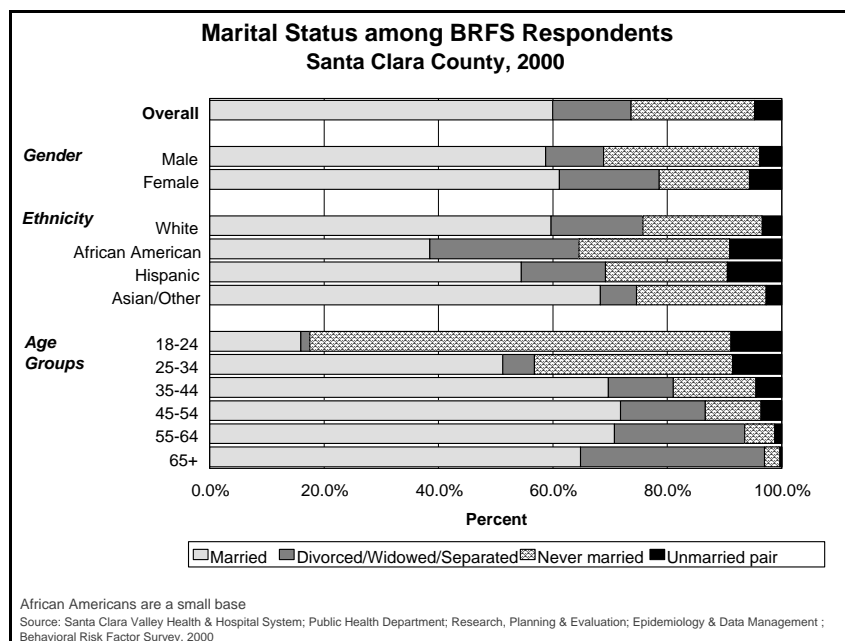
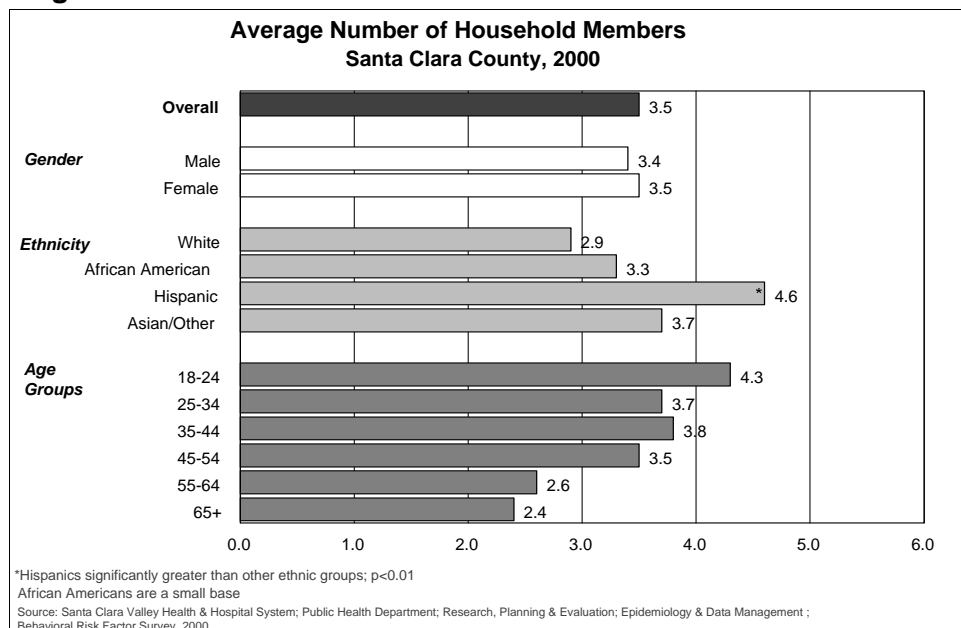
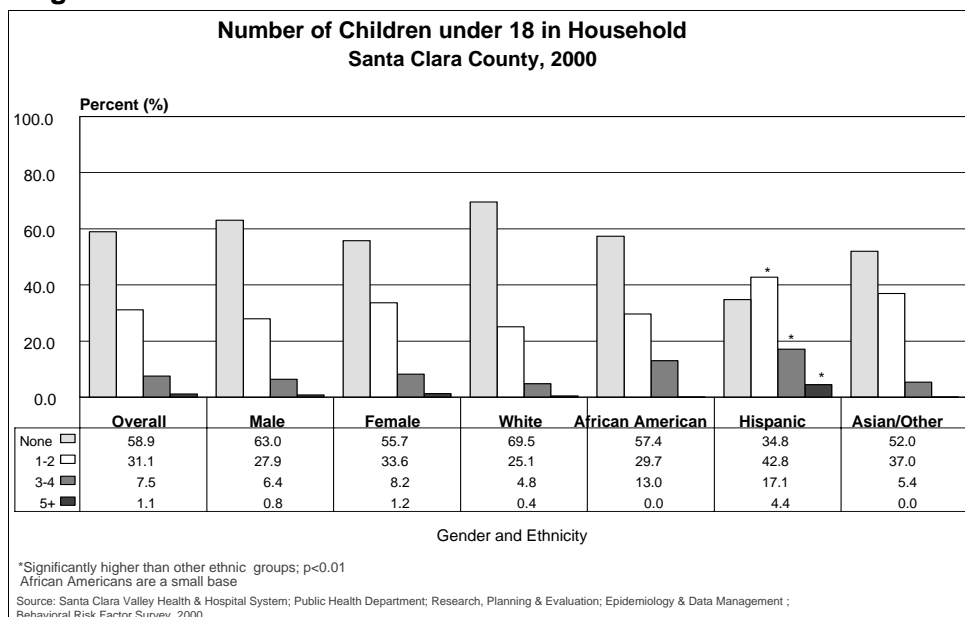


Figure 7 illustrates the marital status of BRFs 2000 respondents. Overall, about 60% of the participants were married, 21.5% were never married, and 4.7% were a member of an unmarried pair. Moreover, a higher proportion of Asian/others were married (68%) compared to other ethnic groups. A higher proportion of Hispanics were in an unmarried relationship compared to Whites and Asian/others.

**Figure 8**



**Figure 9**



Figures 8, 9, and 10 display the average household composition among survey participants. Hispanics had a significantly higher average number of household members compared to other ethnic groups, whereas Whites had the lowest (Figure 8). Hispanics had the most number of children under age 18 in their household (Figure 9). In contrast, males and Whites were more likely to have no children under 18 years of age in their household compared to females and other ethnic groups, respectively.

The mean age of the oldest child in a household was 9.7 years (Figure 10).

**Figure 10**

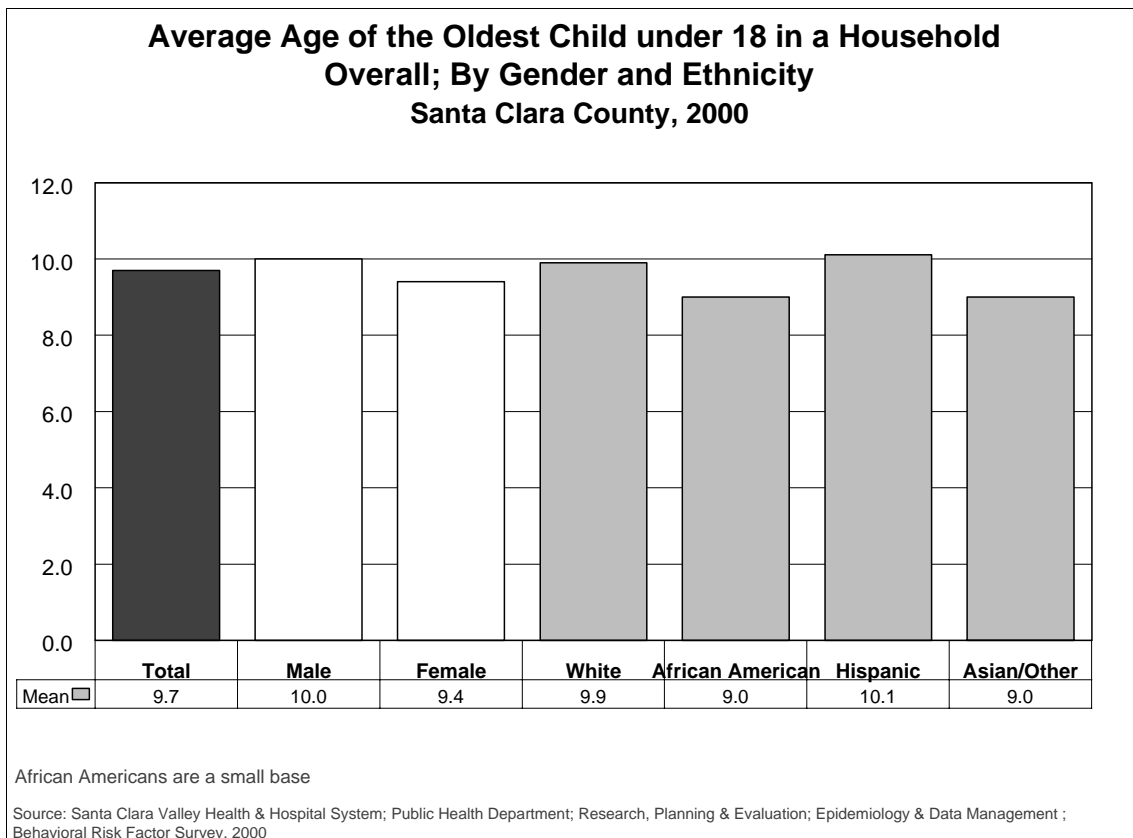


Table 1

**Educational Status (in percent)  
By Gender and Ethnicity  
Santa Clara County, CA, US, 2000**

Education Status	SCC BRFs, 1997 (N=1,299)	SCC BRFs, 2000 (N=2,547)	BRFS, 2000-CA (N=3,896)*	BRFS, 2000-US (Median)**
<b>Less than HS</b>	11.7	8.9	18.0	10.2
Male	11.1	7.7	18.4	10.6
Female	12.3	10.1	18.4	10.5
White	3.0	3.6	6.4	8.4
African American	2.4	4.2	7.9	15.5
Hispanic	31.9	29.6	44.9	22.3
Asian/Other	8.0	2.3	5.6	9.8
<b>HS or GED</b>	19.3	20.2	24.0	32.2
Male	17.2	19.8	22.9	31.1
Female	21.5	20.6	25.7	33.1
White	17.9	18.0	23.6	31.8
African American	26.8	18.5	35.2	36.6
Hispanic	27.9	31.3	24.8	32.6
Asian/Other	13.2	15.2	19.4	26.0
<b>Some College/Post HS</b>	24.4	22.8	29.0	27.9
Male	24.0	20.0	27.4	26.6
Female	25.1	25.5	31.1	28.5
White	25.8	25.5	33.5	28.9
African American	40.5	41.8	33.6	30.5
Hispanic	24.2	21.0	21.5	23.7
Asian/Other	16.5	15.5	28.1	26.0
<b>College +</b>	44.0***	46.4***	28.0	27.5
Male	47.0	50.4	31.3	30.0
Female	40.9	42.4	24.8	25.3
White	53.6	52.4	36.5	30.2
African American	33.4	35.4	23.3	18.8
Hispanic	14.1	16.4	8.8	15.8
Asian/Other	61.3	62.2	46.9	34.6

\*California BRFs, CDC, 2000; \*\*US BRFs, CDC, 2000; \*\*\*P<0.01

Educational status among BRFs 2000 participants (less than vs. more than a high school education) differed between gender and ethnic groups.

Figure 12 shows that a higher proportion of women had less than a high school (LTHS) education compared to men. Furthermore, 30% of all Hispanics had less than a high school education, which was significantly higher (ten-fold) than other ethnic groups. Overall, the median level of education reported by survey participants was “some college education” (data not shown).

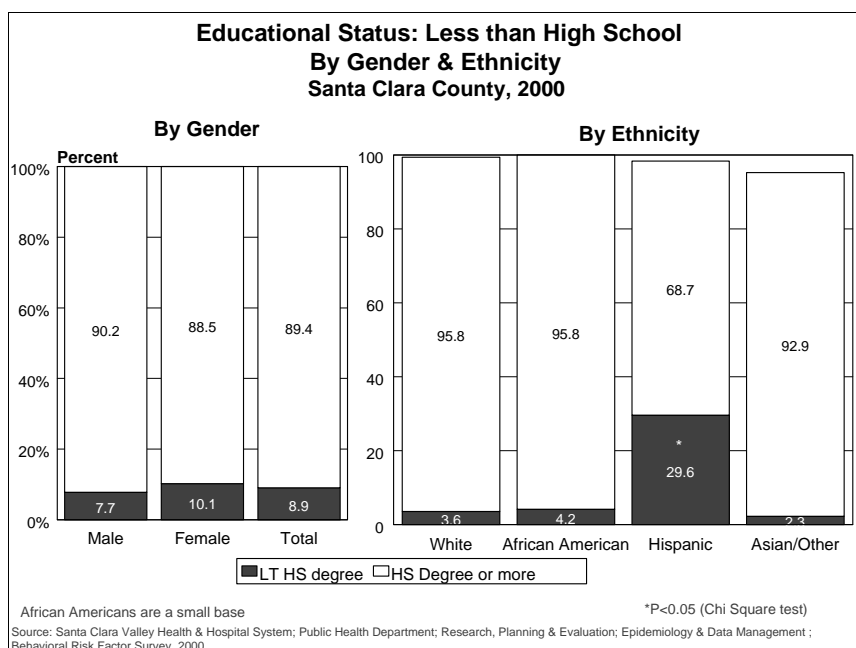
Table 1 and Figure 13 report the educational status of Santa Clara County, California-State, and the nation’s BRFs respondents. A significantly higher proportion of participants (male and female) had a college degree or more in Santa Clara County compared to data reported by state and national respondents.

A significantly higher proportion of Hispanics (30%) in SCC reported having less than a high school education compared to other ethnic groups (Figure 12). However, the statewide median of Hispanics (45%) reporting less than a high school education was even higher than local statistics (Table 1).

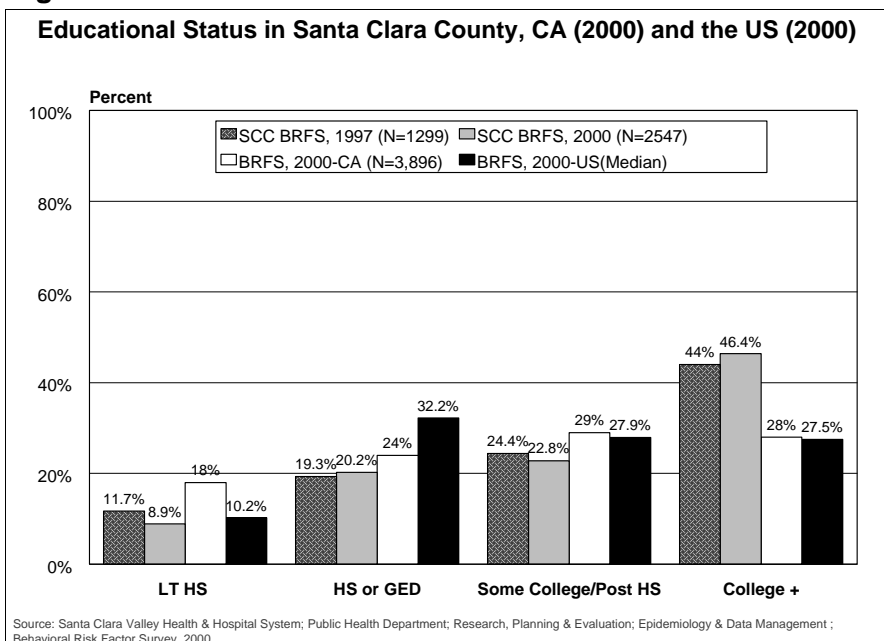
A significantly higher proportion of Asian/others had a college education or higher in SCC, which was higher than state or national medians. Likewise, African Americans in SCC reported higher educational levels than African Americans in California and the nation.

**Figure 12**

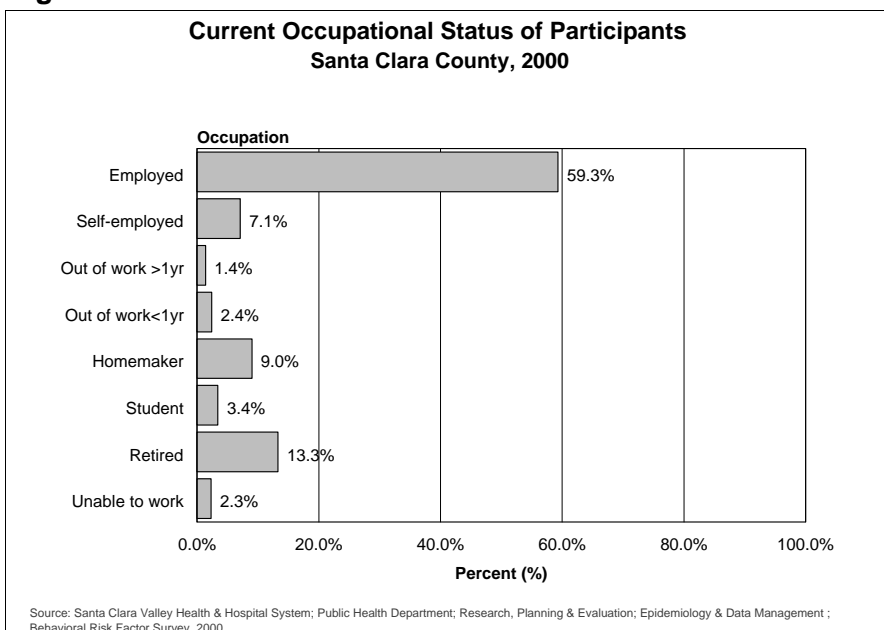
A lower proportion of survey participants reported less than a high school education in 2000 than in 1997, particularly among the Hispanic and Asian/other groups. Conversely, a greater proportion of African Americans reported having less than a high school education in 2000 than in the 1997 BRFs (Table 1).



**Figure 13**



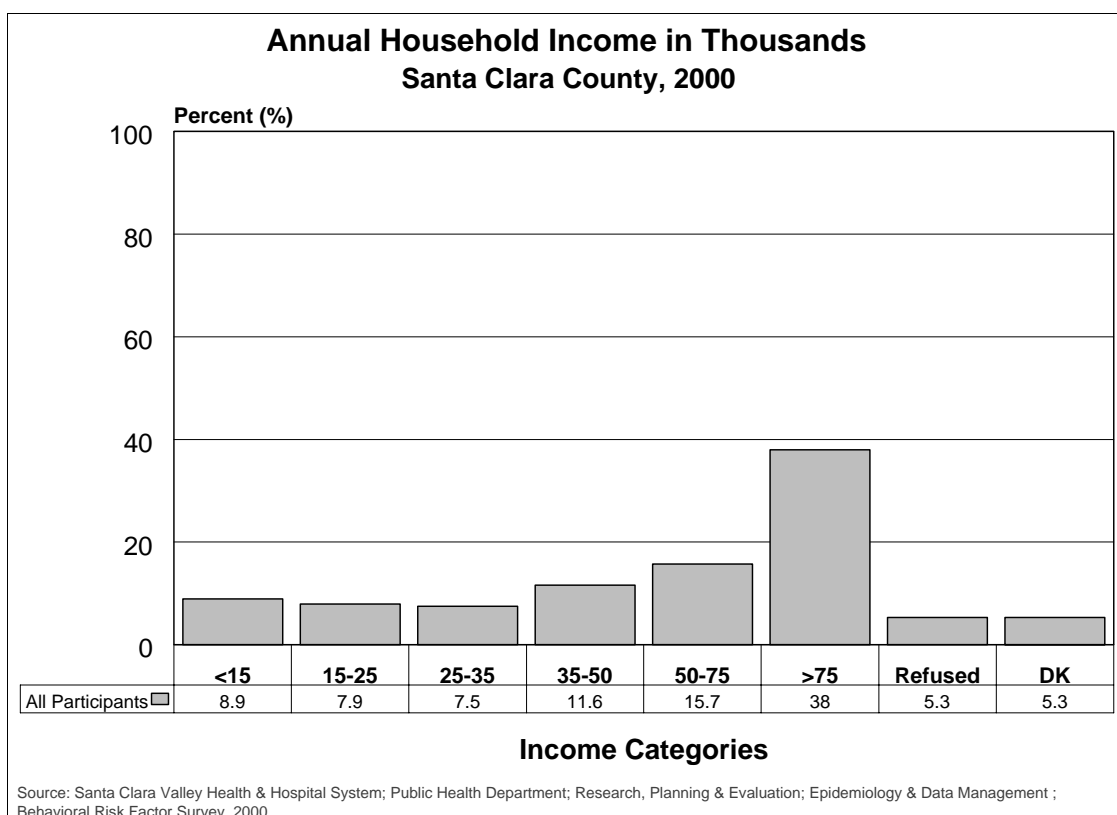
**Figure 14**



As illustrated in Figure 14, 59.3% of adults surveyed were employed and 7.1% were self-employed. In addition, 3.8% were out of work and 2.3% were unable to work. A higher proportion of men were employed (68.3%) than women (50.1%). The data also indicate that 17.7% of adult women were homemakers. There were no significant differences ( $p=0.4$ ) in current occupational status across ethnic groups (data not shown).

The average household income in Santa Clara County in 2000 was between \$35,000 and \$50,000. However, the median income, reflecting the 50<sup>th</sup> percentile, was between \$50,000 to \$75,000. Figure 15 shows that 40% of respondents in the BRFSS 2000 study had an annual household income of \$75,000 or more. More males (44.6%) reported a household income of \$75,000 or higher than females (35.6%). There was also a correlation between increasing household income and higher education levels (Chi square for trend:  $p < 0.001$ , data not shown).

**Figure 15**

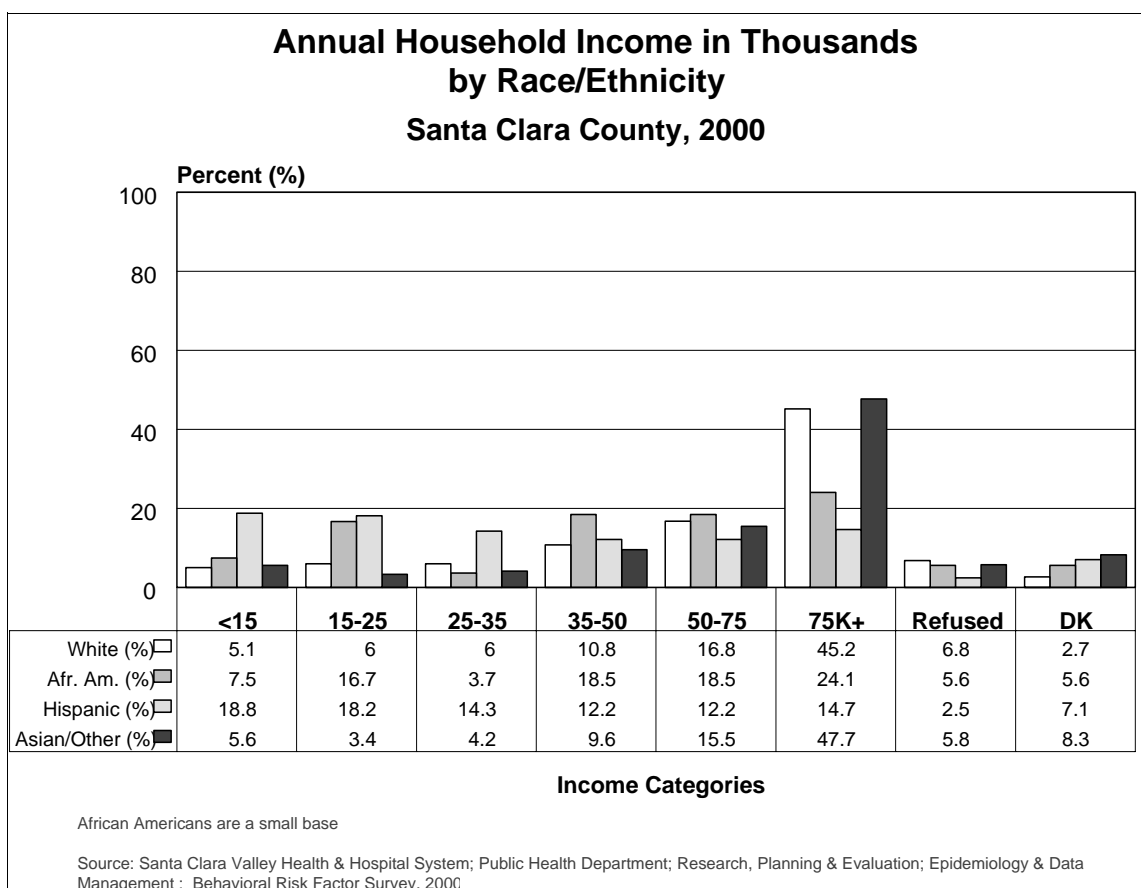




About 50% of Hispanics had an annual income of less than \$35,000. In contrast, 48% of Asian/others and 45% of Whites had an annual household income of \$75,000 or more (Figure 16).

Through further analysis, household size was found to be inversely correlated with household income. As the average household size increased, household income levels decreased (Chi square for trend:  $p < 0.0001$ ; Data not shown). This correlation could have indirect implications for lack of access to healthcare due to cost and inability to afford health plans among respondents with lower income levels and larger household sizes.

**Figure 16**



Poverty is defined as having a total family income less than the family threshold set by the Federal Poverty Guidelines, or informally referred to as the “Federal Poverty Level (FPL)” (Dalaker & Proctor, 1999, as cited by U.S. Census Bureau, 2000 and the DHHS, 1999). Figure 17A shows that 7.5% of all participants were under the 100% FPL. Additionally, a significantly higher proportion of Hispanics (24.9%) were under the 100% FPL. For a listing of the income levels calculated at the 100% FPL, please refer to the glossary, under “Federal Poverty Level”.

**Figure 17**

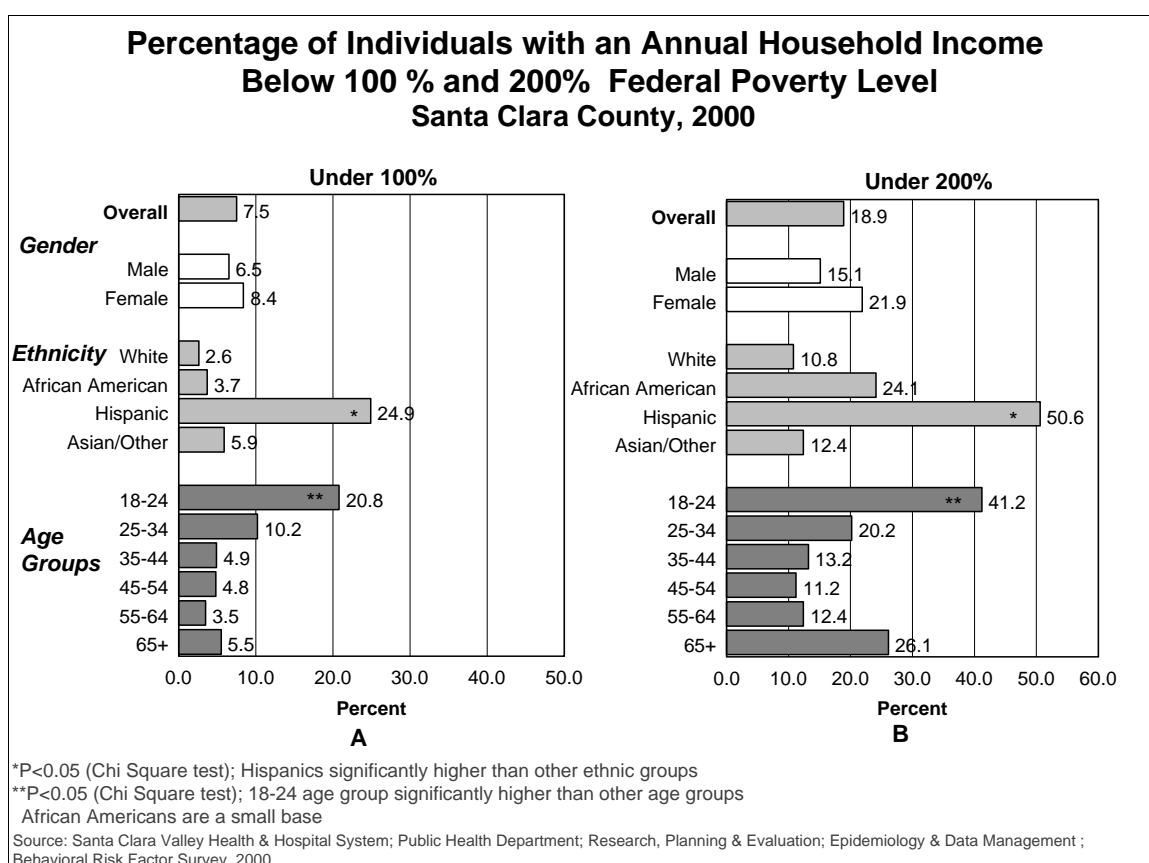


Figure 17B also shows that nearly 19% of all participants were under the 200% Federal Poverty Level. (The analysis based on 200% FPL is not mutually exclusive from the analysis based on those under 100% FPL). A significantly higher proportion of Hispanics (50%) fell under 200% of the Federal Poverty Level compared to other ethnic groups in Santa Clara County.

### **Summary of Key Demographic Findings of BRFS 2000 Participants**

Comparison of the BRFS Study population with the County population estimates revealed that the BRFS captured a higher proportion of women and a lower percentage of African Americans and Asian/others. Over half of the respondents interviewed were married, with an average household size of 3.5 members. Overall, SCC residents reported higher levels of education than those in California or in the US. Almost 67% of the respondents were employed at the time of the survey.

Compared to BRFS 1997 results, significantly more Hispanics and respondents in the 25 to 34 age group were surveyed in the BRFS 2000. More respondents were married in the BRFS 2000 as compared to respondents in 1997. More respondents were divorced in the BRFS 1997 compared to respondents in 2000. Significantly less survey participants were self-employed in 2000 than those surveyed in 1997. Furthermore, more survey participants reported a higher household income in 2000. There was a lower proportion of respondents who fell in the “less than \$10,000” category and a higher proportion who fell in the “over \$75,000” category in the BRFS 2000 than in 1997. A comparison of 1997 and 2000 BRFS results are available in Appendix A.

Although 40% of the respondents in the BRFS 2000 had an annual household income of over \$75,000, there were disparities observed across ethnic groups. Approximately 7.5% and 19% of participants were under the 100% or 200% Federal Poverty Level, respectively.

Overall, Hispanics in SCC’s BRFS 2000 reported higher prevalence of having more children, being in an unmarried relationship, having larger household sizes, receiving less education, and falling below the Federal Poverty Level.

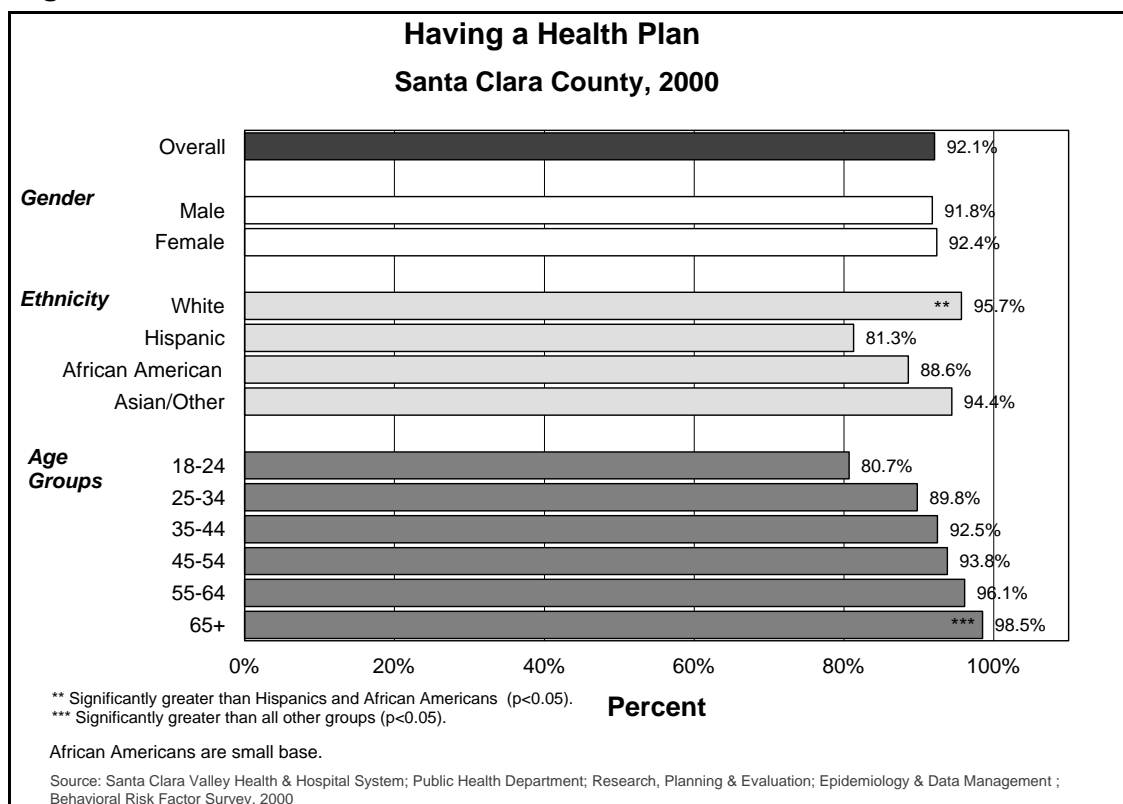
Healthcare coverage and assurance of access to comprehensive, high-quality health services is essential in eliminating health disparities and improving the quality of life and life span of individuals. The Healthy People 2010 report (DHHS, 2000) states that strong predictors of access to quality healthcare include having health insurance, a higher income level, and a regular primary care provider or other source of ongoing healthcare. Provision of health education, linkage to appropriate services/coverage, and clinical preventive care serve as indicators of access to quality healthcare services. Such health services offered by the Public Health Department contribute to the continuum of care for residents in Santa Clara County.

**Healthy People 2010 Goal and Objectives:  
Healthcare Coverage and Access**

<b>Goal: Improve access to comprehensive, high-quality healthcare services</b>		
<b>Objectives</b>		<b>Target</b>
1-1	Increase the proportion of persons with health insurance	100% total coverage
1-2	(Developmental) Increase the proportion of insured persons with coverage for clinical preventive services	Developmental
1-3	Increase the proportion of persons appropriately counseled about health behaviors	Developmental
1-4	Increase the proportion of persons who have a specific source of ongoing care	96% (Adults 18+ years)
1-5	Increase the proportion of persons with a usual primary care provider	85%
1-6	Reduce the proportion of families that experience difficulties or delays in obtaining healthcare or do not receive needed care for one or more family members	7%

Data Analysis of BRFs Responses for  
Healthcare Coverage and Access

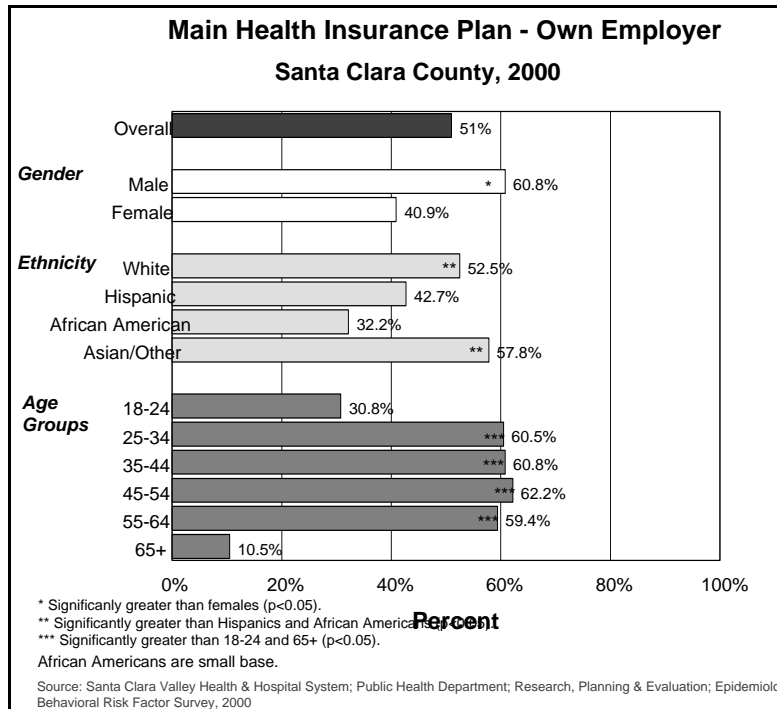
Figure 1



Overall, 92.1% of respondents reported having some form of health insurance coverage (Figure 1), which is slightly below the Healthy People 2010 target of 100%. A greater proportion of Whites and Asian/others responded to having healthcare coverage than African Americans and Hispanics. In addition, more respondents had health coverage as age increased.

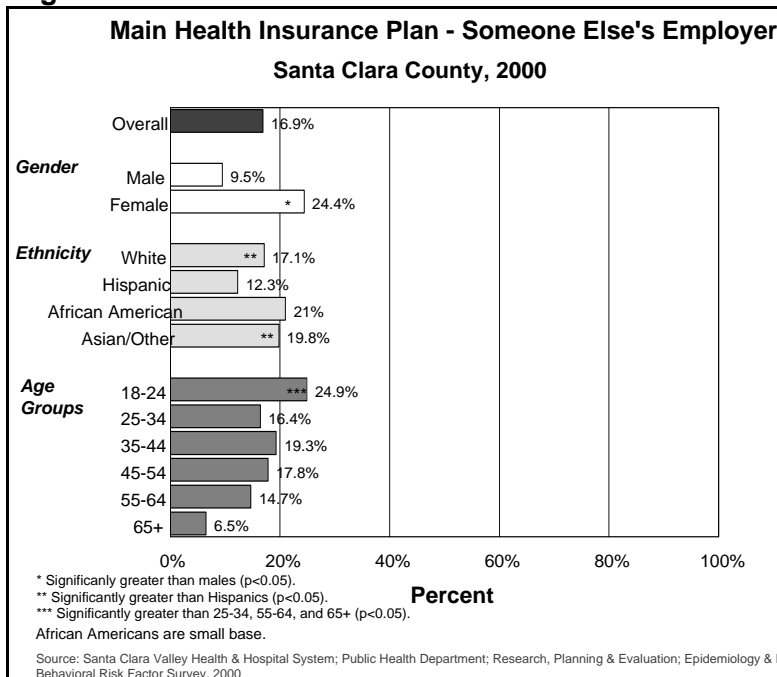
Further analysis revealed that more Whites 18 to 24 years old had health coverage than Asian/others in the same age group. At age 65, the proportions of having healthcare coverage were similar among all ethnic groups (data not shown).

**Figure 2**



Overall, 51% of respondents had health insurance coverage from their employer (Figure 2). More men reported receiving coverage from their employers than women. The proportions of healthcare coverage provided by employers were similar among Whites and Asian/others. Both groups had significantly higher employee coverage as compared to African Americans and Hispanics. More respondents 25 to 64 years old also received health benefits from their employers than those age 18 to 24 years or 65 and older.

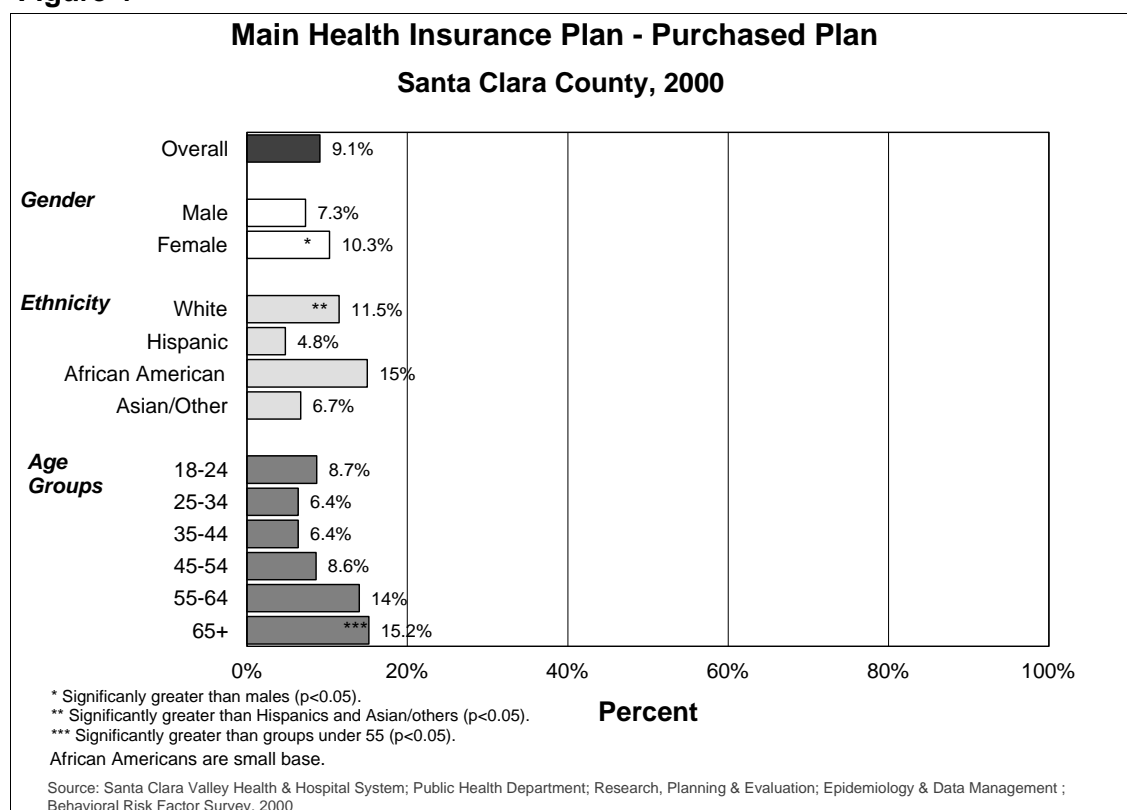
**Figure 3**



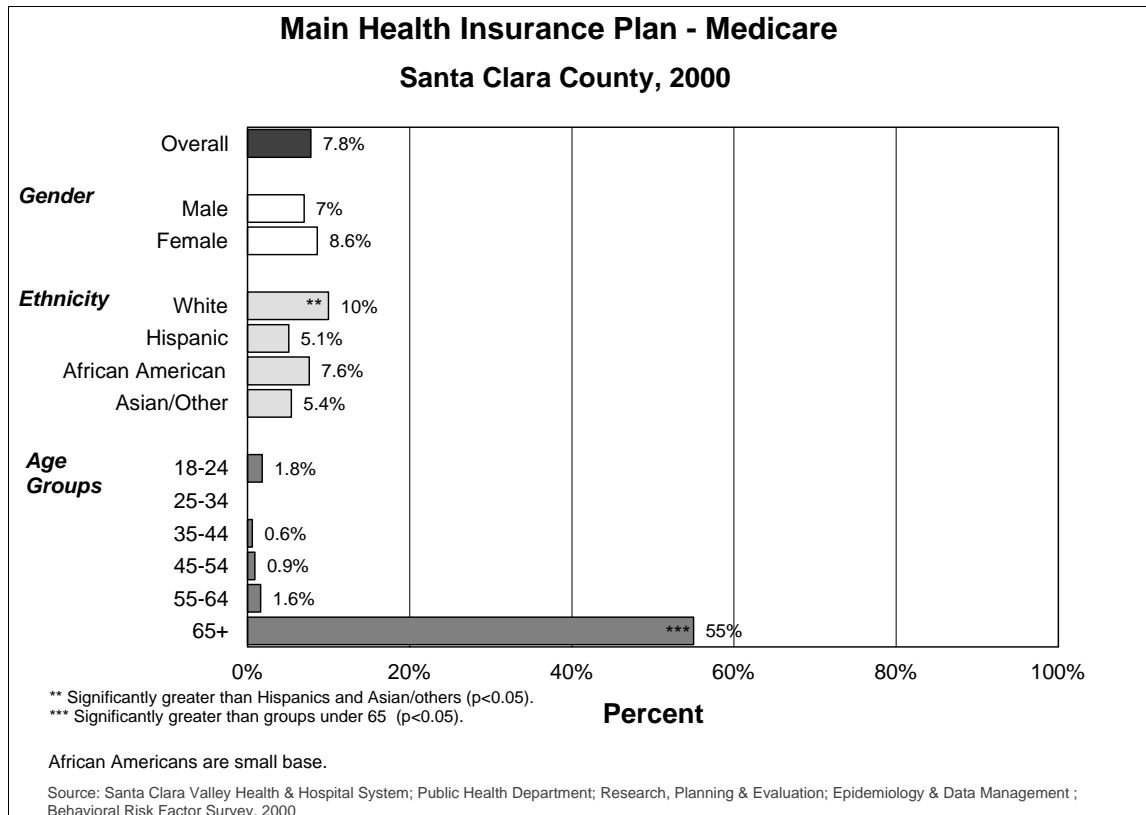
Approximately 16.9% of respondents received health insurance coverage from someone else's (i.e. spouse or parent) employer (Figure 3). A greater proportion of females reported having healthcare coverage from someone else's employer as compared to males. Significantly more Whites and Asian/others reported being covered by someone else's employment health benefits than Hispanics. Moreover, a greater proportion of young adults reported being covered by someone else's employment health plan than older adults.

Of all respondents, 9.1% purchased a health plan on their own. The proportion of females purchasing their own healthcare coverage plan was significantly higher than males. Older respondents reported the highest rate of purchasing their own health plan than other age groups. A higher percentage of Whites purchased their own health plan, compared to Asian/others and Hispanics. Although African Americans had the higher proportion of purchasing their own health plan, the sample size (base) for African Americans was too low to be considered for statistical comparison.

**Figure 4**



**Figure 5**

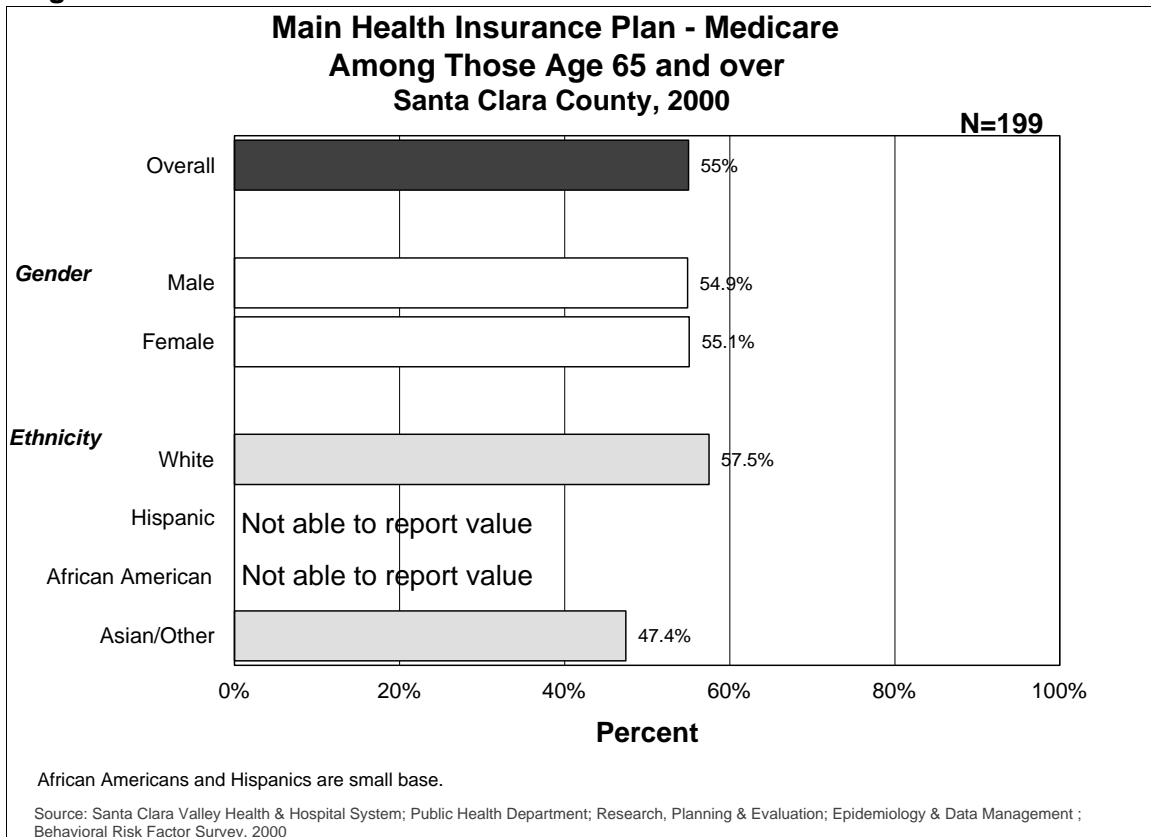


Overall, 7.8% of respondents, especially Whites and older adults, reported that their main health insurance coverage was Medicare (Figure 5). It is not surprising that Medicare covered more than half of older respondents since the government health insurance plan mainly covers adults 65 years and older and other with special circumstances (refer to Glossary of Terms and Acronyms under “Medicare”).



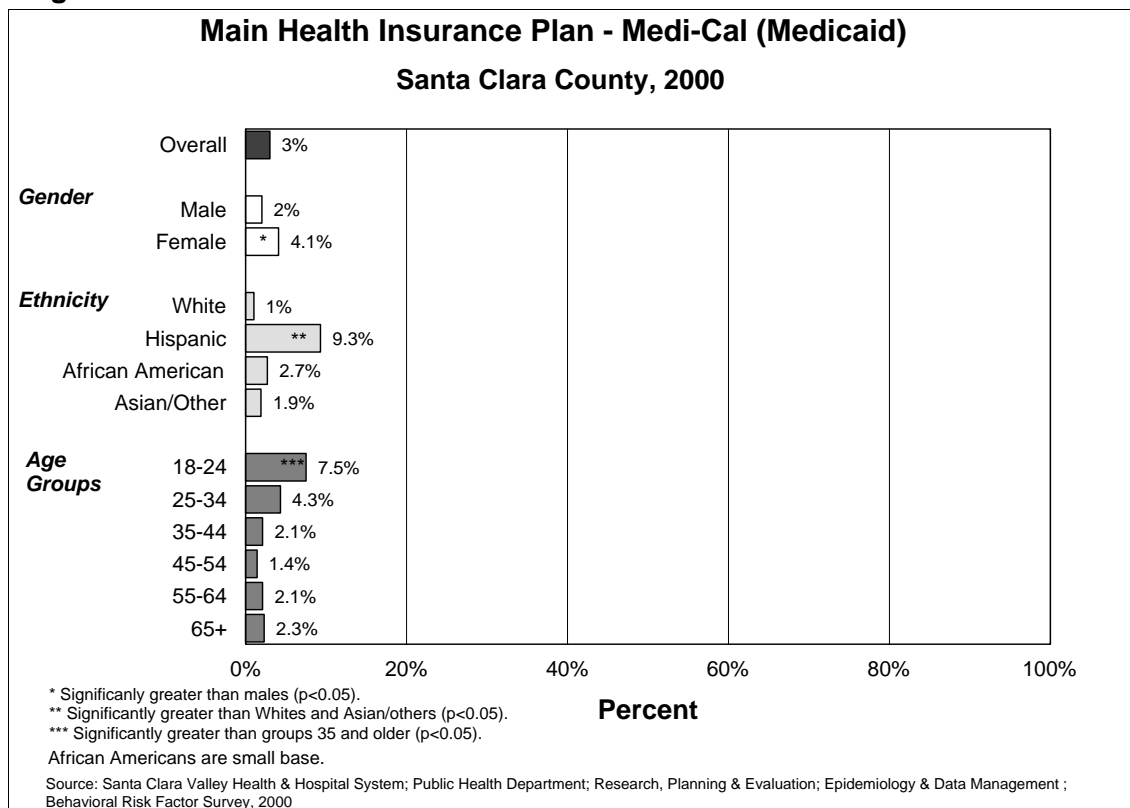
Further analysis revealed that there were no differences between gender or ethnic background among respondents age 65 and older who were covered by Medicare (Figure 6).

**Figure 6**



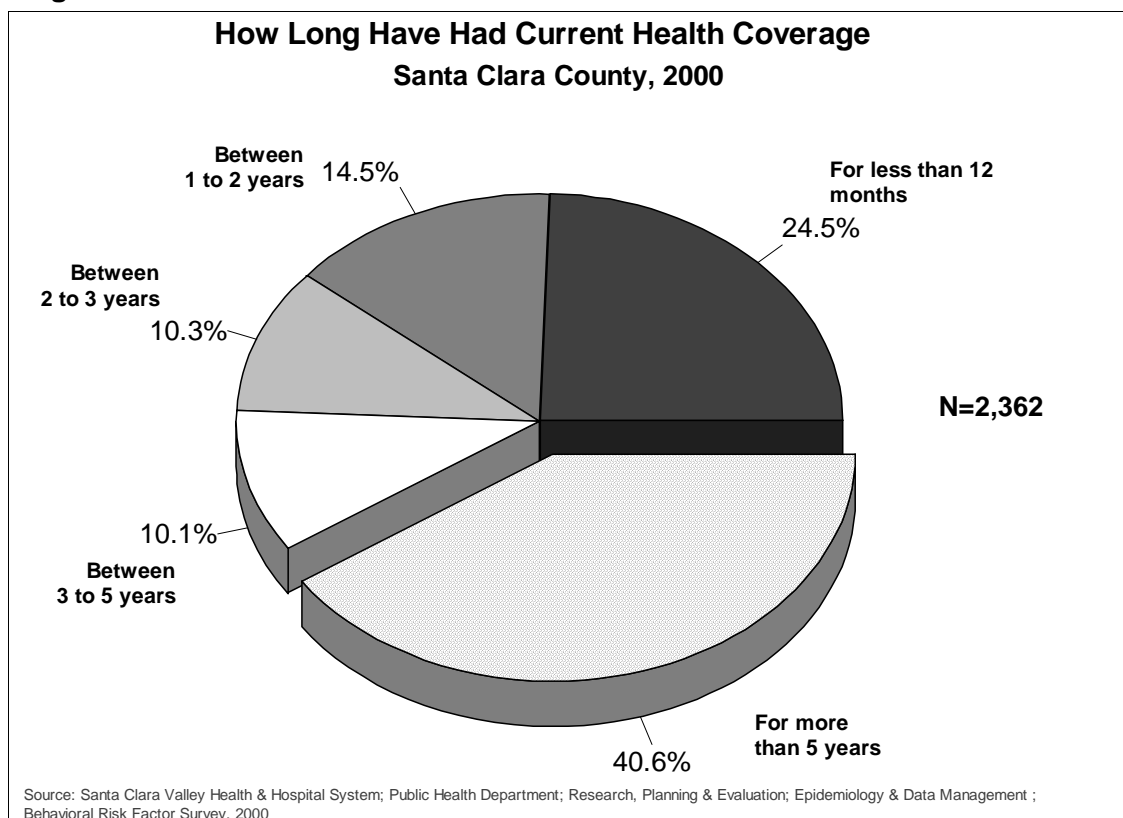
Approximately 3% of respondents reported Medi-Cal (Medicaid) as their main source for health insurance coverage, as seen in Figure 7. A greater proportion of women and Hispanics reported being covered by Medi-Cal than their respective counterparts. In addition, more young respondents were covered by Medi-Cal than those 35 and older.

**Figure 7**



At the time of the BRFFS interview, 40.6% of respondents currently covered had their current health plan for at least 5 years or more (Figure 8). Approximately 24.5% reported having their current health plan for less than 12 months.

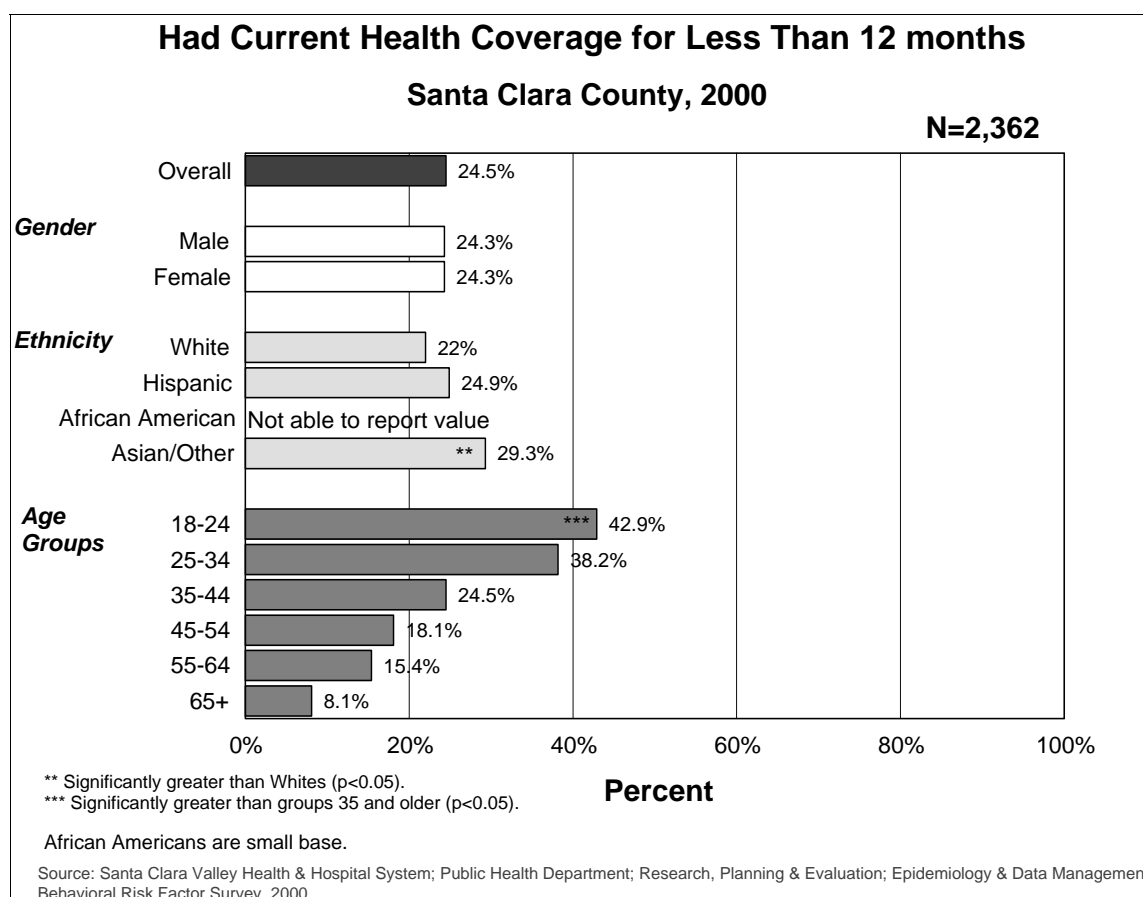
**Figure 8**



Although there were no gender differences reported among those with coverage for less than 12 months, there were observed differences across ethnic and age groups. Significantly more Asian/others had their current health plan for less than a year compared to Whites. Furthermore, younger adults reported higher percents of having their current health plan for less than a year compared to older adults. With increasing age, fewer respondents were likely to have a current healthcare plan for less than a year (Figure 9).

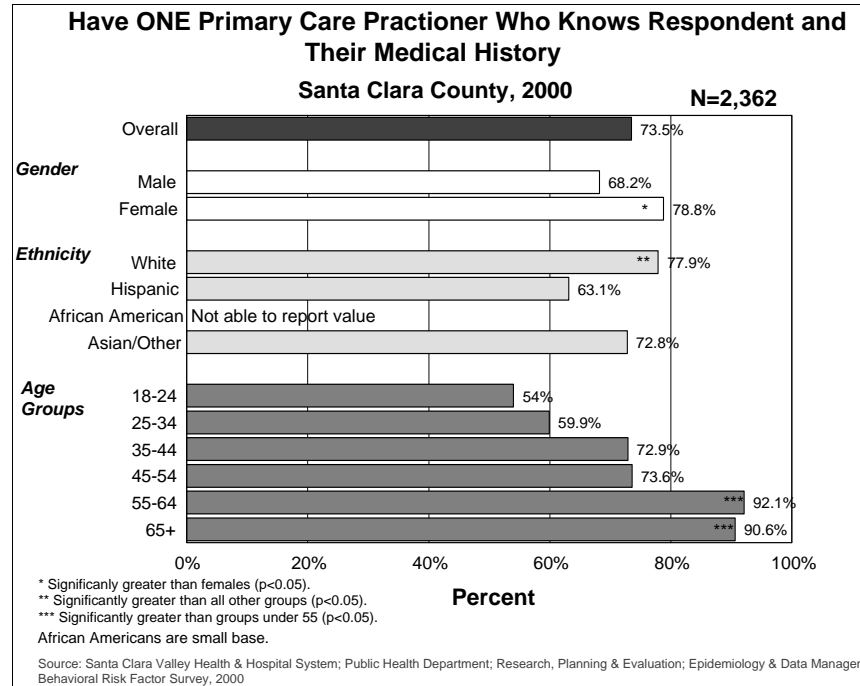
Further analysis revealed that higher proportions of women 55 to 64 years old (21.4%) reported having their current health for less than a year compared to men in the same age group (9.3%) (figure not shown).

**Figure 9**

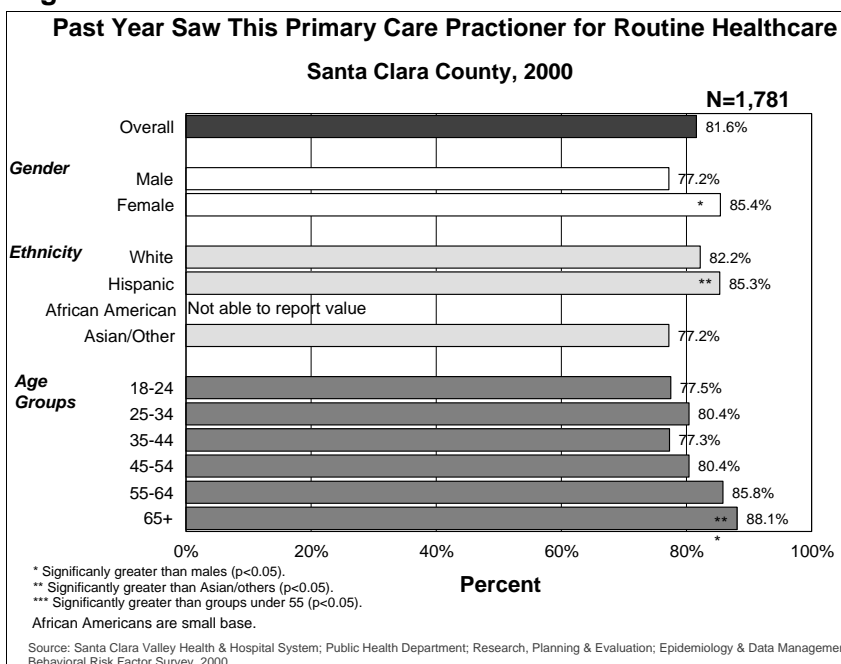


**Figure 10**

Of those with a health plan, 73.5% reported having one primary care practitioner who was familiar with them and their medical history, which is lower than the Healthy People 2010 target of 85% (Figure 10). More women, Whites, and older adults reported having a primary care provider familiar with their medical history than other groups.



**Figure 11**



Approximately 81.6% of respondents with one primary care practitioner saw this person for routine healthcare in the past year (Figure 11). Overall, more women, Hispanics, and respondents 65 years and older visited their usual primary care practitioner for a routine checkup in the past year than other groups.

**Figure 12**

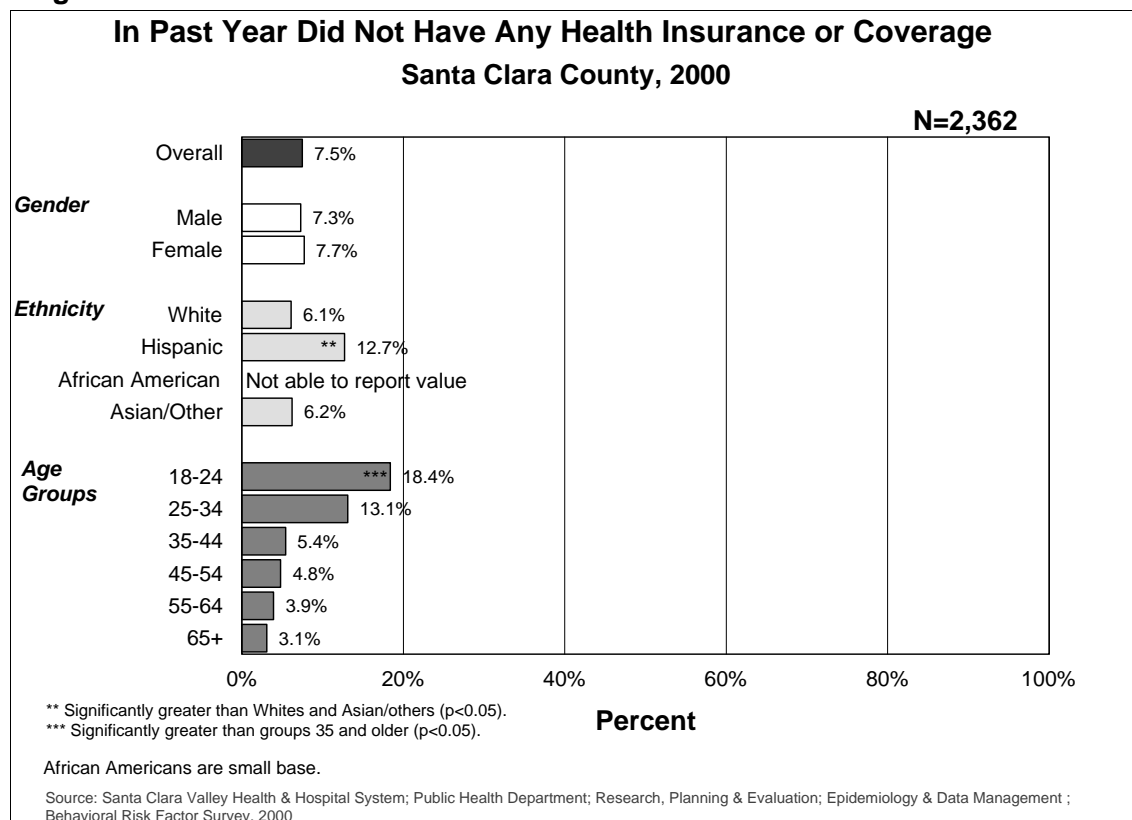
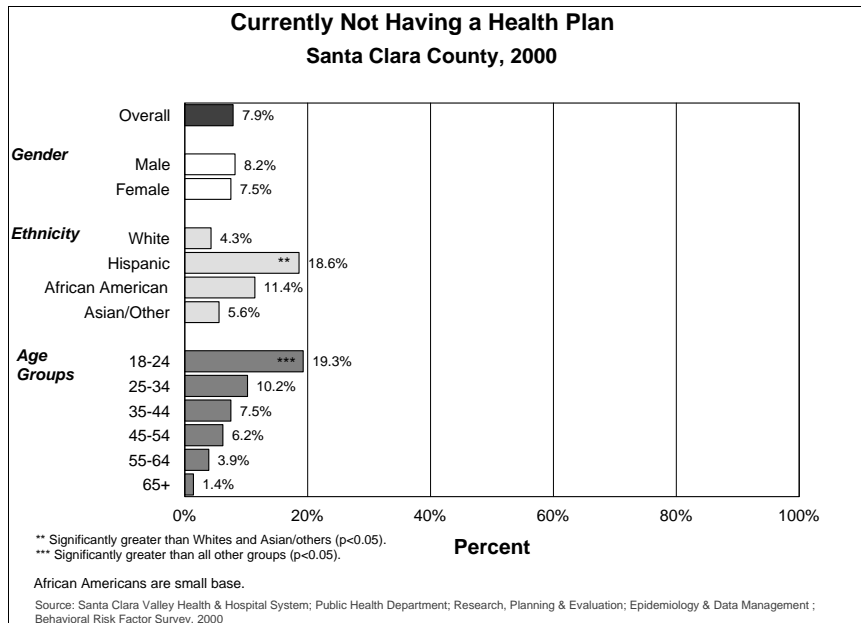


Figure 12 illustrates that 7.5% of respondents who currently had a health plan acknowledged that they did not have any health insurance or coverage at some time during the past year (Figure 12). Women, Hispanics, and younger adults reported the highest proportions of lacking healthcare coverage at some time during the past year.

Further analysis revealed that more Hispanics age 18 to 24 were not covered under a health plan in the past year compared to Asian/others in the same age group. Similarly, more Asian/others age 45 to 54 were not covered by any health insurance in the past year compared to Whites in the same age range (data not shown).

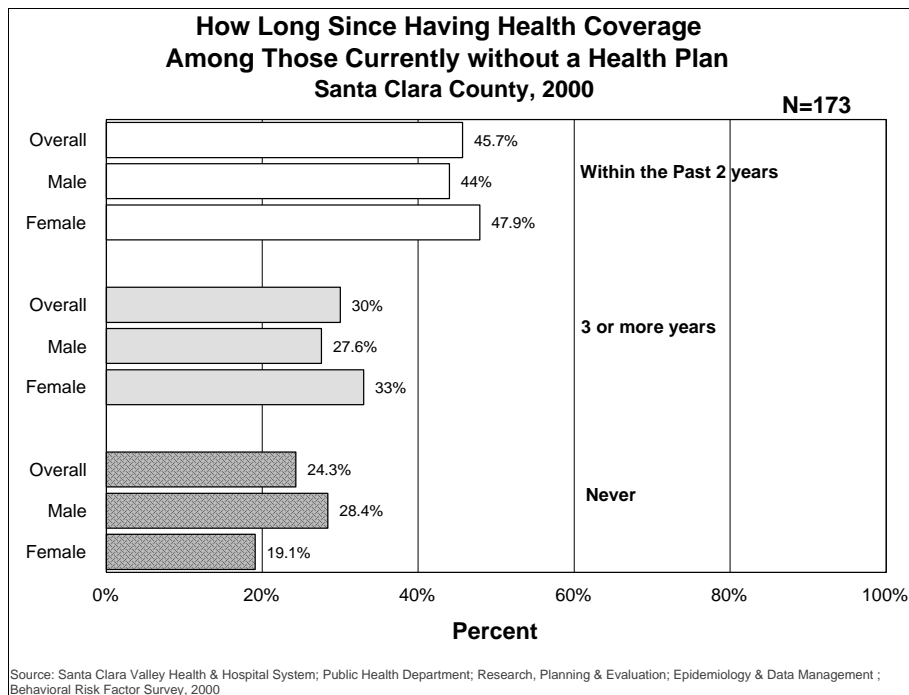
**Figure 13**

The proportion of respondents who were not covered by a health plan was 7.8%. More Hispanics and young adults reported currently not having health coverage than their respective counterparts.



Of those without health plan, 45.7% did not have coverage for the past two years (Figure 14). Another 30% responded that they did not have a plan for at least three or more years. Whereas 24.3% acknowledged never having a health plan. Among all these groups, there were no significant differences in responses between genders.

**Figure 14**



Those without healthcare coverage were asked if any or all of three reasons could explain their lack of coverage. Of the 173 who responded, 87.1% considered that it cost too much, 73.8% that health insurance was not offered by employer, and 69.5% that change of employers/loss of job was reason for having no healthcare coverage. Significantly, more Hispanics compared to Whites considered loss of job (for themselves or someone else) was a reason for lack of coverage. No other differences in gender or race/ethnicity were significant.

**Table 1**

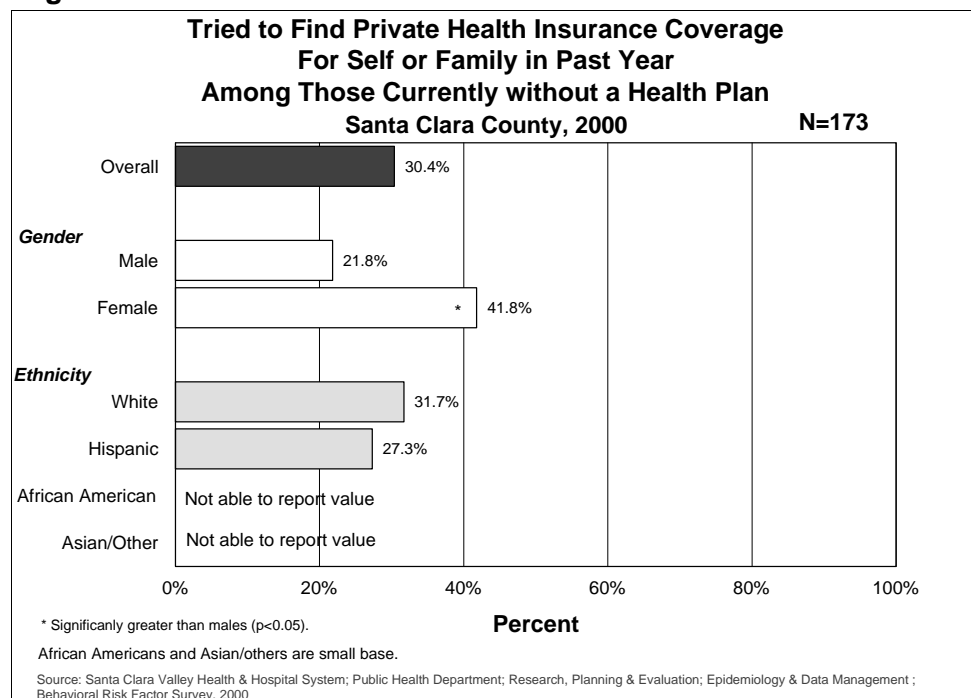
**Reasons Considered Very Important or Important  
for No Healthcare Coverage Among Those Currently without a Plan**

	Overall (%)	Male (%)	Female (%)	White (%)	Hispanic (%)
<b>Loss of Job or Change of Employer (N=173)</b>	69.5	66.7	73.2	55.4	78.2 **
<b>Insurance Not Offered by Employer (N=173)</b>	73.8	71.4	76	63.2	81.3
<b>Insurance Costs Too Much (N=173)</b>	87.1	82.2	94.7	81.4	92.4

\*\* Significantly greater than Whites ( $p < 0.05$ ).

The data suggest that 30.4% of those without a health plan attempted to find a private health insurance for himself/herself or family in the past (Figure 15). A greater proportion of women acknowledged trying to find private health insurance than men.

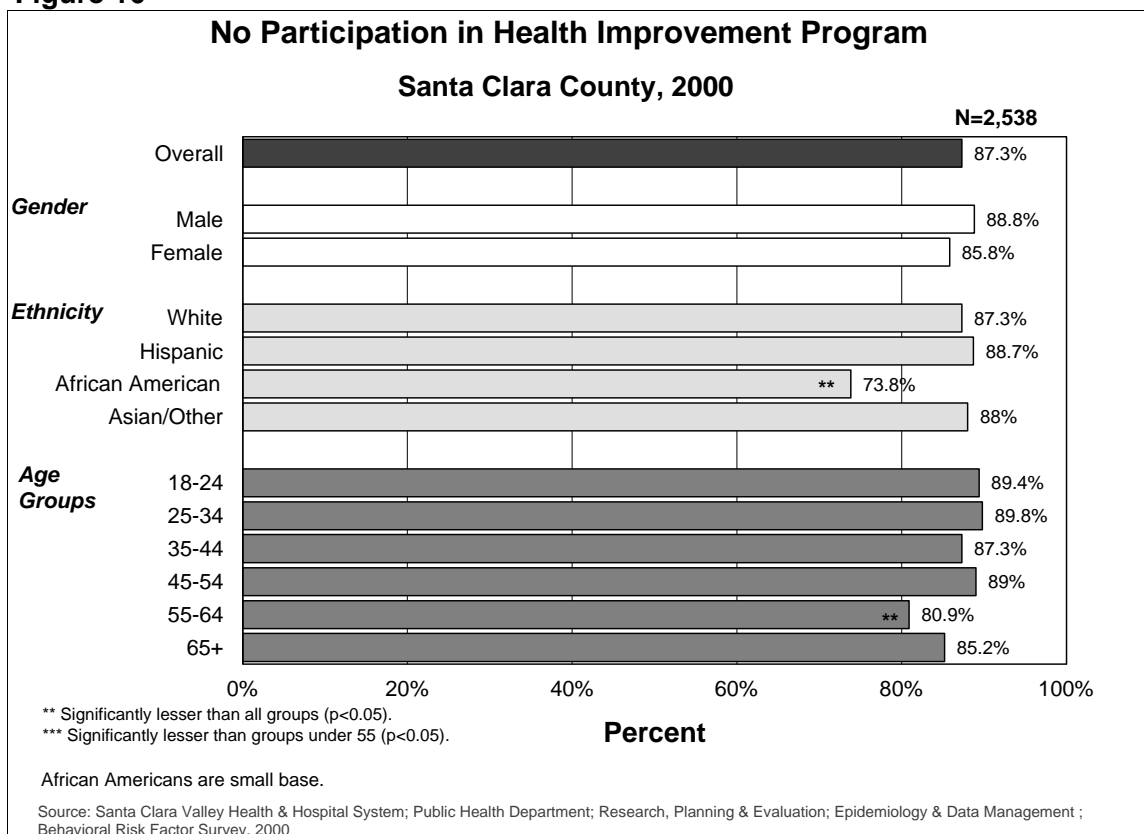
**Figure 15**





Overall, 87.3% of respondents reported that they did not participate in a health improvement program sponsored by an employer, health plan, or community organization (Figure 16). There were no differences between males and females. African Americans and older adults in the 55 to 64 years age range reported lower proportion of not participating in a health improvement plan than other groups. It is important to note that the same size (base) for African Americans is small.

**Figure 16**



**Table 2**

**Not Have a Health Plan  
Santa Clara County, 2000**

Independent Sociodemographic Variables	Unadjusted Odds Ratio	Confidence Interval
Poor or Fair Health Status (Yes=1, No=0)	2.84	2.03, 3.98
Chronic Drinker (Yes=1, No=0)	2.16	1.28, 3.64
Current Smoker (Yes=1, No=0)	1.71	1.20, 2.45
Risk for Second Hand Smoke (Yes=1, No=0)	1.99	1.48, 2.70
Overweight or Obese (Yes=1, No=0)	1.22	0.90, 1.66
Had to See Physician in Past Year (Yes=1, No=0)	0.65	0.48, 0.87
Could Not Pay to See Physician (Yes=1, No=0)	11.64	7.93, 17.09
Last Checkup Three Plus Years Ago (Yes=1, No=0)	2.41	1.78, 3.27
Less Than High School Education (Yes=1, No=0)	3.52	2.44, 5.07
Below 100% Poverty Level (Yes=1, No=0)	7.95	5.68, 11.12
Below 200% Poverty Level (Yes=1, No=0)	5.70	4.18, 7.77
Not Employed (Yes=1, No=0)	1.34	0.99, 1.80
Male (Yes=1, No=0)	1.13	0.84, 1.51
White (Yes=1, No=0)	0.32	0.23, 0.44
Hispanic (Yes=1, No=0)	4.46	3.32, 6.01
Asian/other (Yes=1, No=0)	0.65	0.44, 0.95
Age 40 and over (Yes=1, No=0)	0.42	0.31, 0.57

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management; Behavioral Risk Factor Survey, 2000

The association of respondents' socio-demographic variables and not having a health plan has been presented as both unadjusted (Table 2) and adjusted (Table 3) odd ratios. Fourteen variables associated with lack of healthcare coverage included race/ethnicity, age, gender, drinking status, smoking status, education level, employment status, income level, perception of one's health, and utilization of healthcare (Table 2).

The logistic regression analysis shows after adjusting for confounding, only seven variables significantly influenced the odds of not having health insurance. Hence, adjusted odds ratios suggest that not being able to pay to see a physician (OR: 7.92; 95% CI: 4.98, 12.60), living below the 100% Federal Poverty Level (OR: 2.82; 95% CI: 1.69, 4.70), and living below the 200% Federal Poverty Level (OR: 1.72; 95% CI: 1.06, 2.81) were strongly associated with not having health insurance. In contrast, respondents who were White, Asian, or 40 years or older were more likely to have health insurance. The single most important factor of not having a health plan was low income (Table 3).

**Table 3**

**Not Have a Health Plan  
Santa Clara County, 2000**

	Adjusted Odds Ratio	Confidence Interval
Had to See Physician in Past Year (Yes=1, No=0)	0.65	0.453, 0.94
Could Not Pay to See Physician (Yes=1, No=0)	7.92	4.98, 12.60
Below 100% Poverty Level (Yes=1, No=0)	2.82	1.69, 4.70
Below 200% Poverty Level (Yes=1, No=0)	1.72	1.06, 2.81
White (Yes=1, No=0)	0.39	0.25, 0.60
Asian/other (Yes=1, No=0)	0.40	0.25, 0.64
Age 40 and over (Yes=1, No=0)	0.67	0.47, 0.96

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

## **Summary of Key Findings for Healthcare Coverage and Access**

Having health insurance increases one's access to the healthcare system. Overall, 92.1% of respondents had some form of healthcare coverage, which is less than the Healthy People 2010 target of 100% coverage. Hispanics and young adults age 18 to 24 years represented the lowest proportions of having health insurance.

Of the respondents who reported having a health plan, more than half received their coverage through their employers. Others were covered through a health plan offered by a spouse or parent's employer, purchased their own health plan, or were covered by government-assisted programs, such as Medicare and Medi-Cal.

Overall, a greater proportion of Hispanics and young adults were covered by Medi-Cal or did not have a health plan at all. Only a few Hispanics and young adults reported receiving healthcare coverage through one's own or someone else's employer or purchasing their own health plan compared to their respective counterparts. Older adults were either predominantly covered by Medicare or they purchased their own health plans.

Approximately 73.5% of respondents with healthcare coverage had a usual primary care provider, who was familiar with the respondents and their medical history. This is below the Healthy People 2010 target of 85%.

The respondents who did not have a health plan confirmed that high coverage costs, health plan not offered by employer, and change or loss of job were considered reasons for not having healthcare coverage. Variables strongly associated with not having a health plan were not being able to pay to see a physician and living below the Federal Poverty Level. On the other hand, being White or Asian, and being 40 years or older were variables associated with a higher likelihood for having healthcare coverage.

In comparison to the BRFS1997, significantly more participants in the BRFS 2000 had healthcare coverage and have had their coverage for at least 1 to 3 years. In terms of satisfaction, more respondents in 2000 felt "neutral" about their present health plan than survey participants in 1997. Among respondents who did not currently have a health plan, more BRFS 2000 participants reported that they never had coverage than participants in 1997. A comparison of 1997 and 2000 BRFS results are available in Appendix A.

## perception of health

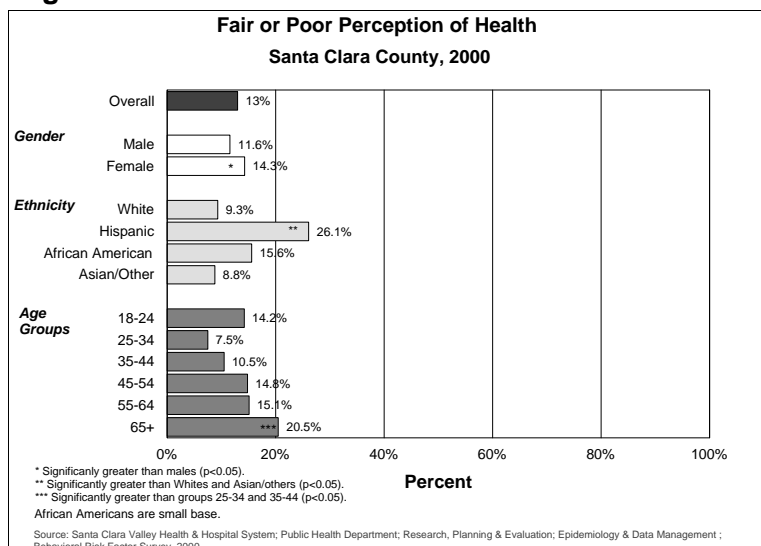
The World Health Organization describes health as, “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (n.d.) This definition represents a shift from a historical concept that health is the absence of illness or disease to now encompass a multidimensional concept that includes physical, mental and social well-being.

Although the perception of health is not an improvement objective in the Healthy People 2010 objectives, the BRFSS 2000 survey questioned Santa Clara County residents about how they viewed their physical and mental health. Responses may indirectly reflect the local health system’s delivery of care and health promotion. However, it is also important to note that with the County’s diverse population, cultural characteristics may have an impact on health-seeking behavior, accessing medical care, and practicing healthy lifestyles, which combined may influence the perception of health.

### **Data Analysis of BRFSS Responses for Perception of Health**

Respondents who participated in the survey were asked to identify how they perceived their general health. They selected either “excellent”, “very good”, “good”, “fair” or “poor”. Figure 1 shows that 13% of respondents perceived their health to be fair or poor, which was slightly lower than responses reported in the state of California (16.7%). A higher proportion of Hispanics and respondents age 18 to 24 years perceived themselves to be in fair or poor health. Furthermore, perception of fair or poor health increased after age 45. This may be attributable to the general decline of health, which happens with increased age.

**Figure 1**

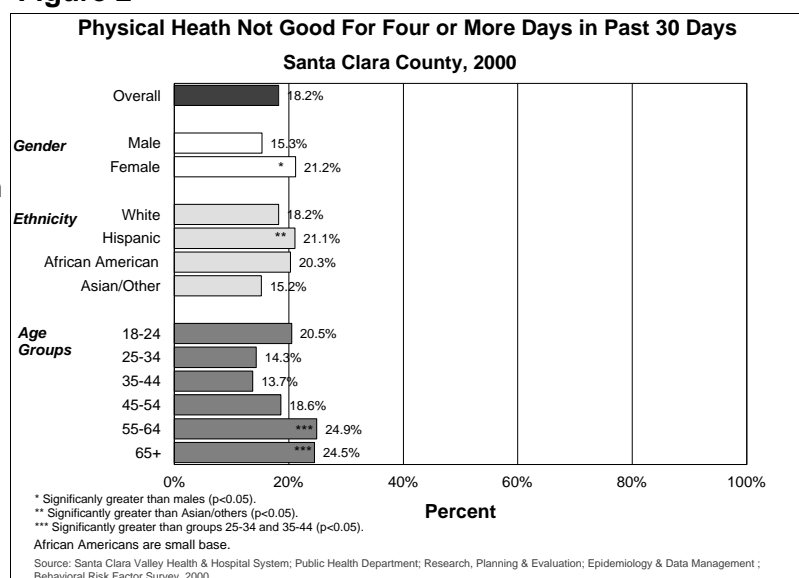


Further analysis found that more women 35 to 44 years old (14.5%) perceived themselves in fair or poor health compared to men in the same age group (6.9%). A higher proportion of Hispanics in all age groups perceived themselves in fair or poor health compared to other respective ethnic and age groups (figure not shown).

Respondents reported an average four (4) days when they did not feel well physically during the previous 30 days. Overall, 18.2% of respondents reported at least 4 days of not feeling physically well (Figure 2). Significantly more Hispanics compared to Asians reported not feeling physically well for at least 4 days. Additionally, more respondents 55 and older felt physically ill for at least 4 days in the past month compared to those 25 to 44 years old. Women also reported higher proportions of feeling ill for at least 4 days compared to men.

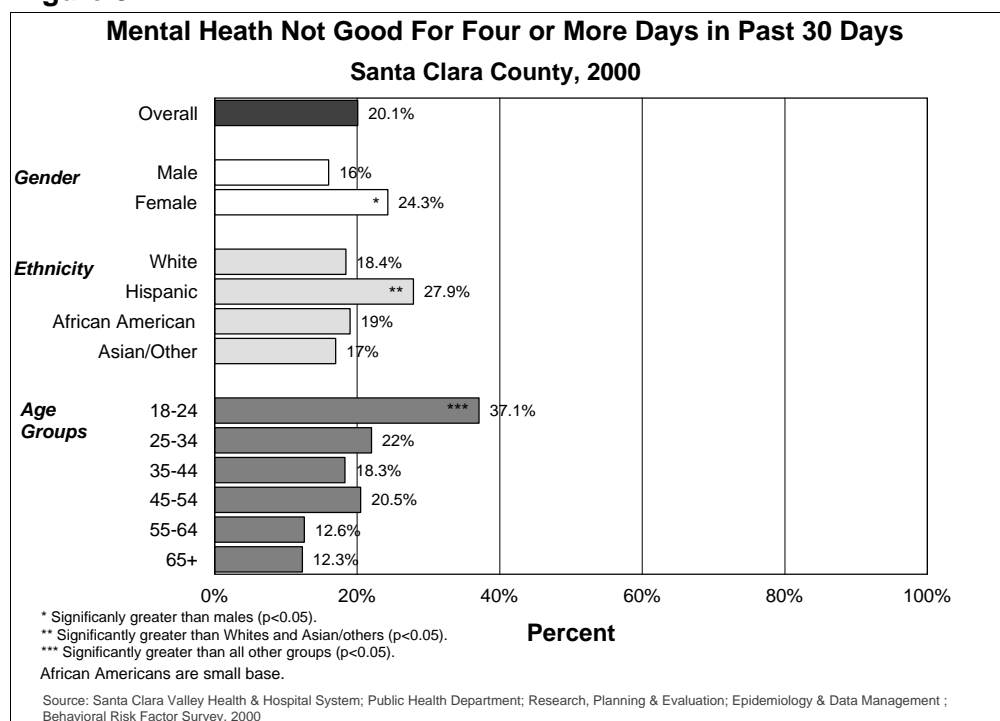
**Figure 2**

Further analysis revealed that higher proportions of Hispanic (27.2%) and White (21.4%) females perceived themselves to be in poor physical health for at least 4 days in the past 30 days compared to Hispanic (15.4%) and White (15.3%) males. More women younger than age 55 reported a negative perception of physical health for at least 4 days compared to men in the same age range. By age 55 responses were similar (figure not shown).



Respondents reported an average of four (4) days when their mental health was not good during the previous 30 days. Overall, 20.1% of respondents perceived their mental health as poor for 4 days or more (Figure 3). More women, Hispanics, and adults (younger than 55 years) reported for at least 4 or more days than other groups.

**Figure 3**

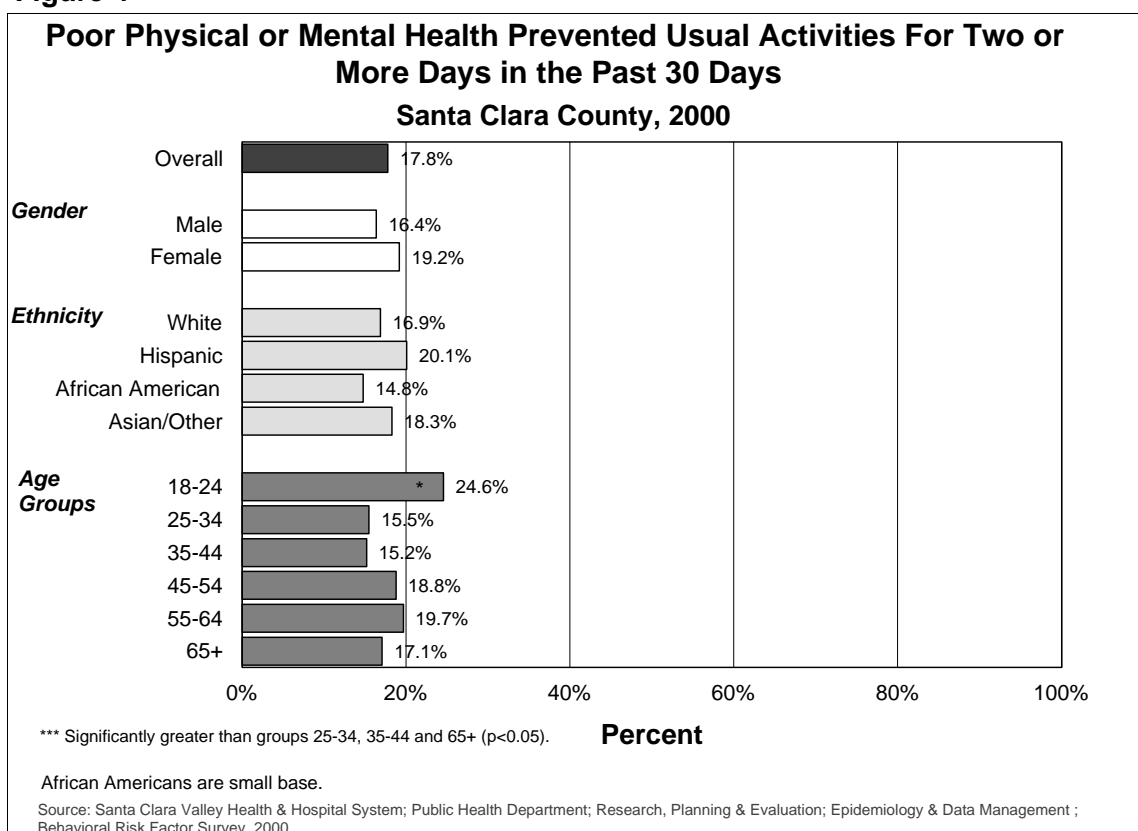


Further analysis revealed that more Hispanic (37.4%) and White (22.9%) women described their mental health as poor for at least 4 days in the previous 30 days than did men in the same ethnic groups. A higher proportion of Hispanics age 18 to 34 years old also reported perceiving their mental health as poor for 4 days or more compared to other ethnicities in the same age groups. Similarly, reports of feeling poor mental health were higher among younger women age 18 to 24 and 35 to 44 years old compared to men in the same age groups (figure not shown).

The average number of days respondents said that their physical or mental health prevented them from conducting their usual activities was 2 days. Overall, 17.8% of survey participants reported two or more days of limited activities due to poor physical or mental health (Figure 4). There were no significant differences in responses among gender and ethnic groups. However, a greater proportion of 18 to 24 year olds reported usual activity limitations compared to other age groups.

Further analysis revealed that more Hispanic women activity limitations for at least 2 days in the past 30 days than Hispanic men and women in other ethnic groups. Younger women age 18 to 24 years old were also more unable to perform usual activities compared to women 25 to 34 and 65 years and older. Similarly, significantly more men 18 to 24 years old were unable to perform usual activities in the past 30 days than men in other age groups (data not shown).

**Figure 4**





**Table 1**

**Health Perception as Poor or Fair  
Santa Clara County, 2000**

Independent Sociodemographic Variables	Unadjusted Odds Ratio	Confidence Interval
Chronic Drinker (Yes=1, No=2)	1.03	0.60, 1.76
Current Smoker (Yes=1, No=0)	1.41	1.04, 1.90
Risk for Second Hand Smoke (Yes=1, No=0)	1.46	1.13, 1.87
Overweight or Obese (Yes=1, No=0)	1.76	1.37, 2.27
No Health Plan (Yes=1, No=0)	2.84	2.03, 3.98
Had to See Physician in Past Year (Yes=1, No=0)	2.32	1.82, 2.97
Could Not Pay to See Physician (Yes=1, No=0)	4.81	3.32, 6.98
Last Checkup Three Plus Years Ago (Yes=1, No=0)	0.80	0.60, 1.08
Less Than High School Education (Yes=1, No=0)	5.78	4.28, 7.82
Below 100% Poverty Level (Yes=1, No=0)	3.59	2.62, 4.91
Below 200% Poverty Level (Yes=1, No=0)	4.31	3.36, 5.54
Not Employed (Yes=1, No=0)	2.27	1.79, 2.88
Male (Yes=1, No=0)	0.79	0.63, 0.99
White (Yes=1, No=0)	0.51	0.40, 0.64
Hispanic (Yes=1, No=0)	3.39	2.65, 4.32
Asian/other (Yes=1, No=0)	0.59	0.43, 0.80
Age 40 and over (Yes=1, No=0)	1.59	1.25, 2.02

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

The association of respondents' socio-demographic variables and not having a health plan has been presented as both unadjusted (Table 1) and adjusted (Table 2) odd ratios. There were 15 variables that were found to be associated poor or fair health perception: race/ethnicity, age, gender, years of education, employment, income, bodyweight, smoking, health perception and utilization of healthcare (Table 1).

The logistic regression analysis shows that after adjusting for confounding only seven variables significantly influenced the odds of not having negative perception of their health (Table 2). Those with poor or fair health perception were more likely to be overweight or obese (OR: 1.48 95% CI: 1.11- 1.97), needed to see a physician in past year (OR: 2.98 95% CI: 2.20 - 4.02), could not pay to see a physician (OR: 3.81 95% CI: 2.46 - 5.88), had less than a high school education (OR: 3.07 95% CI: 2.06- 4.58; lived below 200% of the federal poverty level (OR: 3.36; 95% CI: 2.48- 4.57); were not employed (OR: 1.66 95% CI: 1.25 - 2.20), and were 40 years old or older (OR: 1.65; 95% CI: 1.22 - 2.24).

**Table 2**

**Health Perception as Poor or Fair  
Santa Clara County, 2000**

	Adjusted Odds Ratio	Confidence Interval
<b>Overweight or Obese (Yes=1, No=0)</b>	<b>1.48</b>	<b>1.11, 1.97</b>
<b>Had to See Physician in Past Year (Yes=1, No=0)</b>	<b>2.98</b>	<b>2.20, 4.02</b>
<b>Could Not Pay to See Physician (Yes=1, No=0)</b>	<b>3.81</b>	<b>2.46, 5.88</b>
<b>Less Than High School Education (Yes=1, No=0)</b>	<b>3.07</b>	<b>2.06, 4.58</b>
<b>Below 200% Poverty Level (Yes=1, No=0)</b>	<b>3.36</b>	<b>2.48, 4.57</b>
<b>Not Employed (Yes=1, No=0)</b>	<b>1.66</b>	<b>1.25, 2.20</b>
<b>Age 40 and over (Yes=1, No=0)</b>	<b>1.65</b>	<b>1.22, 2.24</b>

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

### Summary of Key Findings for Perception of Health

A greater proportion of Hispanics, women 35 to 44 years old, and adults 18 to 24 and older than 45 years described their health as poor or fair. More specifically, higher proportions of Hispanic women and adults in the 18 to 24 and older than 45 age groups reported not feeling physically well. Women 18 to 24 and 35 to 44 years old, White and Hispanic women, and Hispanics 18 to 34 and 45 to 54 years old reported higher proportions of not feeling mentally well. Similarly, activity limitations due to poor physical or mental health were reported mostly among young adults 18 to 24 years old and Hispanic women.

Negative perception of health can have an impact on an individual's well being. Survey results showed that factors, such as being overweight/obese, having less than a high school education, being below twice the Federal Poverty Level, not having a job, and being age 40 years and over were all associated with a person's negative perception of health.

More participants in 2000 perceived their overall health to be fair or poor compared to BRFs 1997 results. However, fewer survey participants in 2000 also perceived their health to be excellent or very good compared to participants in the BRFs 1997. A comparison of 1997 and 2000 BRFs results are available in Appendix A.

## dental/oral health

Dental and oral hygiene is an important component of one's health and self-care practice but is often a neglected service in the overall healthcare system. Although home dental healthcare is essential, professional care is also necessary in maintaining optimal oral and craniofacial health. Regular dental visits allow for prevention and/or early detection of oral health problems that can lead to treatments to prevent further damage or reverse the condition.

According to the CDC's Division of Oral Health (2002), nearly one-third of all adults in the United States have untreated tooth decay and 85% had ever experienced dental caries. Untreated tooth decay can lead to pain, abscess, and extraction of tooth, as well as further leading to extensive and costly dental treatment. The CDC's data also show that one in seven adults age 35 to 44 years has gum disease (periodontitis), which increases to one in every four adults age 65 years.

Reisine and Locker (1995, as cited by DHHS, 2000) note that millions of people in the United States experience dental caries (cavities) and periodontal (gum) disease, resulting in needless pain and suffering; difficulty in speaking, chewing, and swallowing; substantial cost of care; loss of self-esteem; decreased economic productivity through lost work and school days; and, in extreme cases, death. Hence, it is apparent that poor oral health and untreated oral diseases and conditions can have a significant impact on self-esteem and the quality of life.

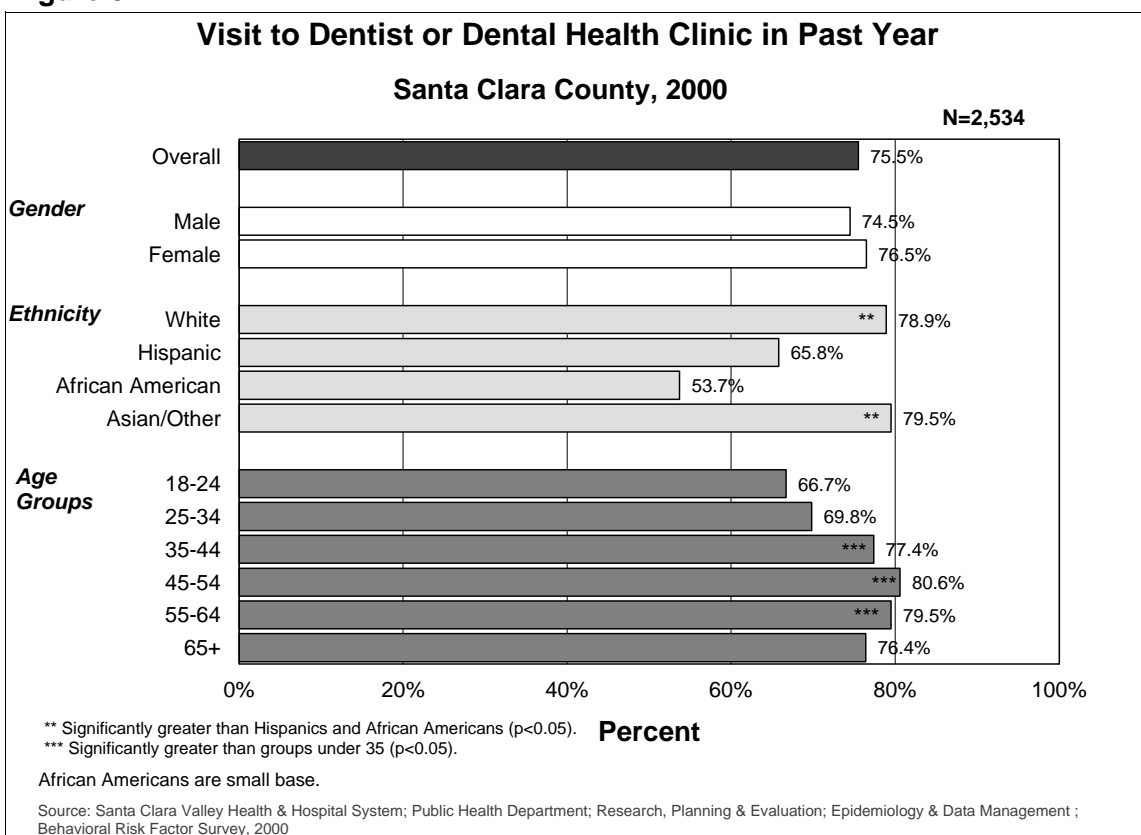
Healthy People 2010 Goal and Objectives: Dental/Oral Health

Goal: Prevent and control oral and craniofacial diseases, conditions, and injuries		
Objectives		Target
21-2d	Reduce the proportion of adults with untreated dental decay	15%
21-3	Increase the proportion of adults who have never had a permanent tooth extracted because of dental caries or periodontal disease	42%
21-4	Reduce the proportion of older adults who have had all their natural teeth extracted	20%
21-5	Reduce periodontal disease (such as gingivitis, which can cause loss of teeth)	
a	Gingivitis	41%
b	Destructive periodontal disease	14%
21-10	Increase the proportion of children and adults who use the oral healthcare system each year	56%
21-11	Increase the proportion of long-term care residents who use the oral healthcare system each year	25%

### Data Analysis of BRFS Responses for Dental/Oral Health

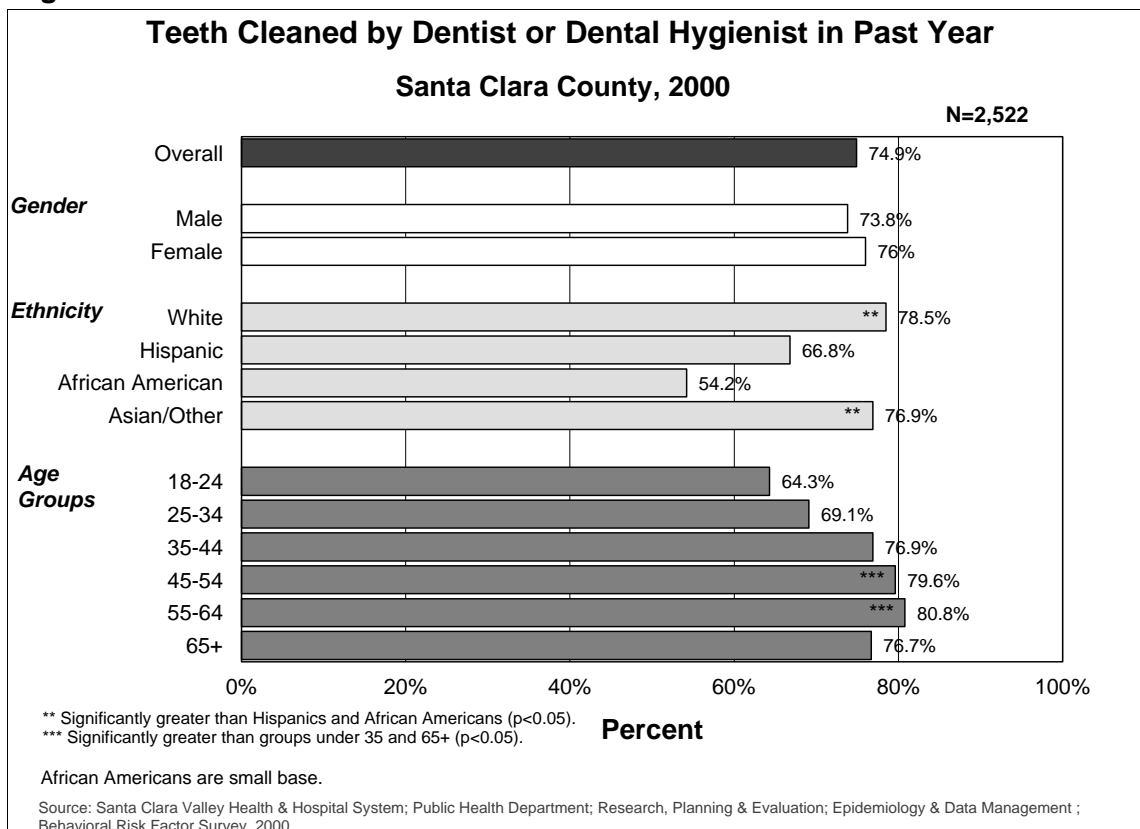
Overall 73.3% of respondents had visited a dentist or dental clinic in the past year from the time of the BRFS interview. There was no apparent difference in responses between men and women (Figure 5). Whites and Asian/others responded similarly and had a greater proportion of reporting dental visits compared to Hispanics and African Americans. Adults 35 years and over also reported going to the dentist more compared to younger adults (18-34 years old).

**Figure 5**



Further analysis revealed that more Asian/others and Whites of various age groups reported visiting the dentist in the past year than Hispanics, except those in the 25 to 34 age group, in which all ethnic groups responded similarly (data not shown).

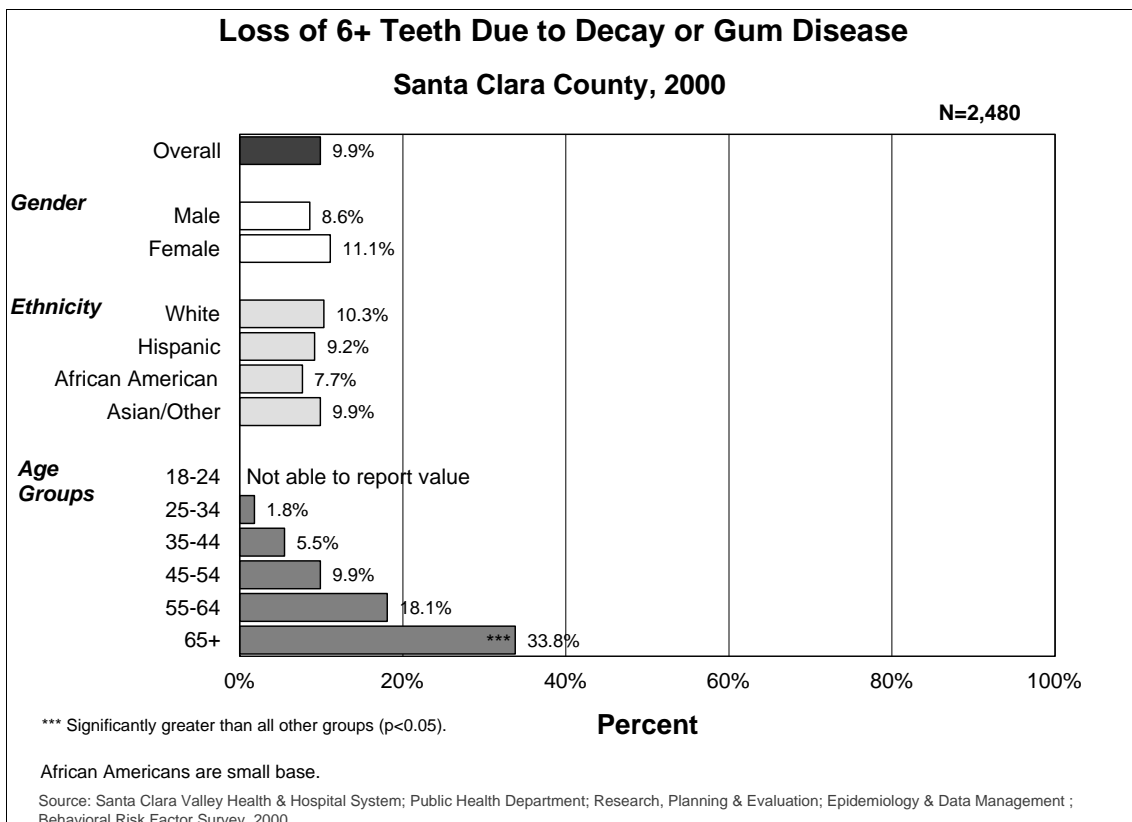
**Figure 6**



Of respondents, 71.5% had their teeth cleaned in the past year (Figure 6). Higher proportions of Whites and Asian/others reported having their teeth recently cleaned at a dental clinic compared to Hispanics and African Americans. Significantly more adults age 45 to 64 years old also reported having their teeth cleaned in the past year compared those younger than 35 years and older than 65 years.

Further analysis revealed that Asian/others and Whites of various age groups, except for the 25 to 34-year age group, reported greater proportions of having their teeth cleaned compared to Hispanics. Moreover, Whites and Asian/others had similar responses in all age groups except in the 55 to 64 age bracket, in which more Whites (87.2%) reported having their teeth cleaned compared to Asian/others (75.5%) (figure not shown).

Figure 7



Nearly 10% of respondents had lost 6 or more teeth due to decay or gum/periodontal disease (Figure 7). With increasing age, a greater proportion of respondents had lost 6 or more teeth. There were no differences reported between genders and ethnic groups.

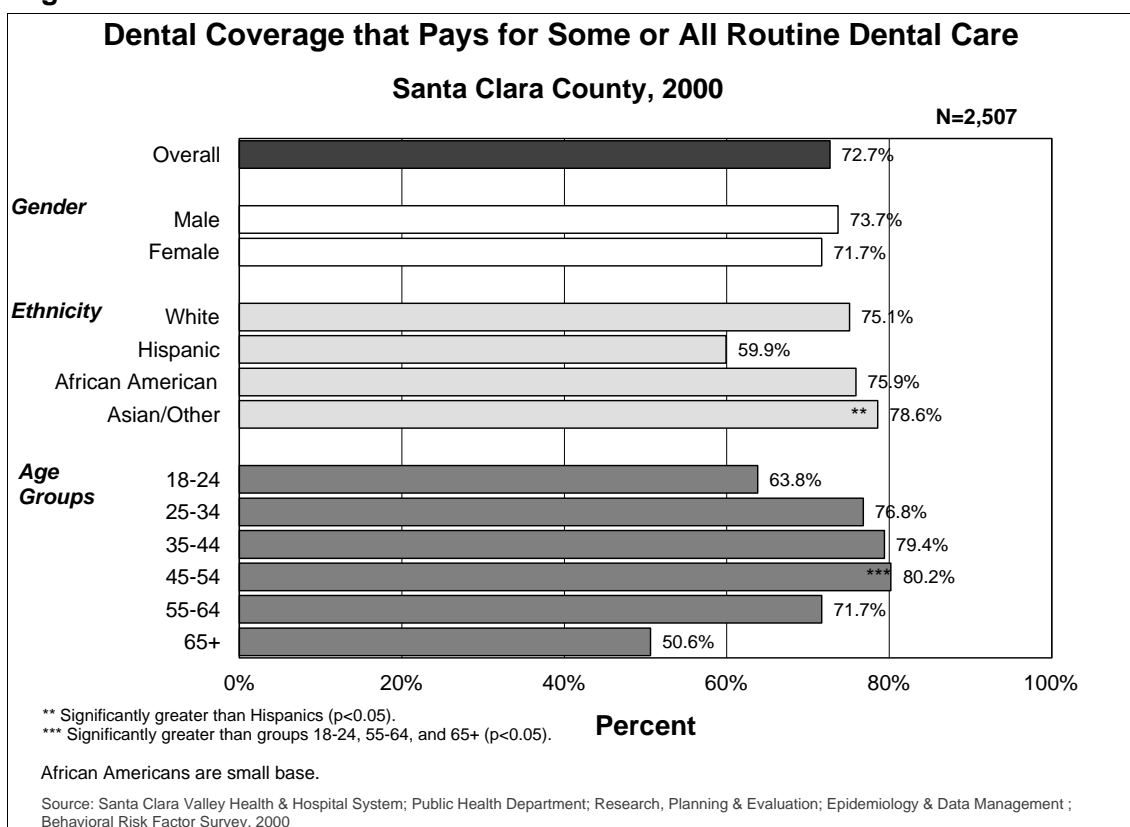
A greater proportion of Hispanic women (12.3%) reported having lost 6 or more teeth compared to Hispanic men (6.4%). A greater proportion of Asian/others (44.4%) 65 years and older had lost 6 or more teeth compared to Whites (29.6%) in the same age group (figure not shown).



Overall, 72.7% of respondents acknowledged having some or full dental coverage for routine care (Figure 8). A higher proportion of respondents age 45 to 54 reported having dental coverage than those age 18 to 24 as well 55 and over. More Whites and Asian/others reported having dental coverage compared to Hispanics.

Further analysis revealed that more Asian/others and Whites younger than 45 years old reported having dental coverage compared to Hispanics in the same age group (data not shown).

**Figure 8**



### **Summary of Key Findings for Dental/Oral Health**

Overall, 73.3% of respondents reported having a dental visit in the past year. Further interventions that promote dental/oral health still need to be applied. Hispanics and younger adults reported fewer visits to the dentist and having their teeth cleaned in the past year. Lower proportions from both groups also reported having dental coverage. Loss of teeth was mostly reported among older adults, especially Asian/other populations. The results from the survey show that those with the lowest proportion of dental coverage, 65 and older, were also the same group reporting the highest proportion of tooth loss due to decay or gum disease. Though no definitive conclusions can be made.

Proper dental care ensures the ability to eat nutritious foods for an entire lifetime. Loss of teeth or untreated tooth pain can encourage poor eating habits. A diet reduced in hearty grains, fruits, and vegetables can lead to immediate and long-term poor dental health.

## doctor visits

Availability of ongoing care, such as doctor visits (or nurse practitioner and physician assistant visits), is an important indicator for the healthcare system's ability to ensure access to a variety of preventive healthcare services in addition to treatment. A continual source of primary care assists in the early identification of health problems and referrals to appropriate health services and specialty care, as well as reduces more costly services, such as emergency room visits and hospitalization, thereby reducing impairments and activity limitations.

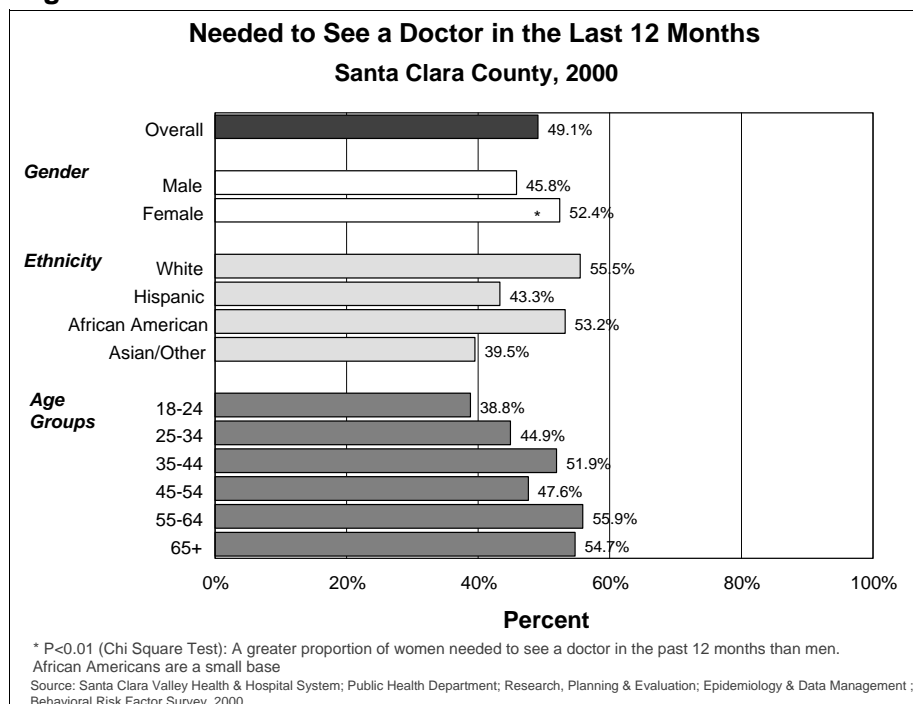
### Healthy People 2010 Objective: Doctor Visits

Objective		Target
1-6	Reduce the proportion of families that experience difficulties or delays in obtaining healthcare or do not receive needed care for one or more family members	7%

### Data Analysis of BRFs Responses for Doctor Visits

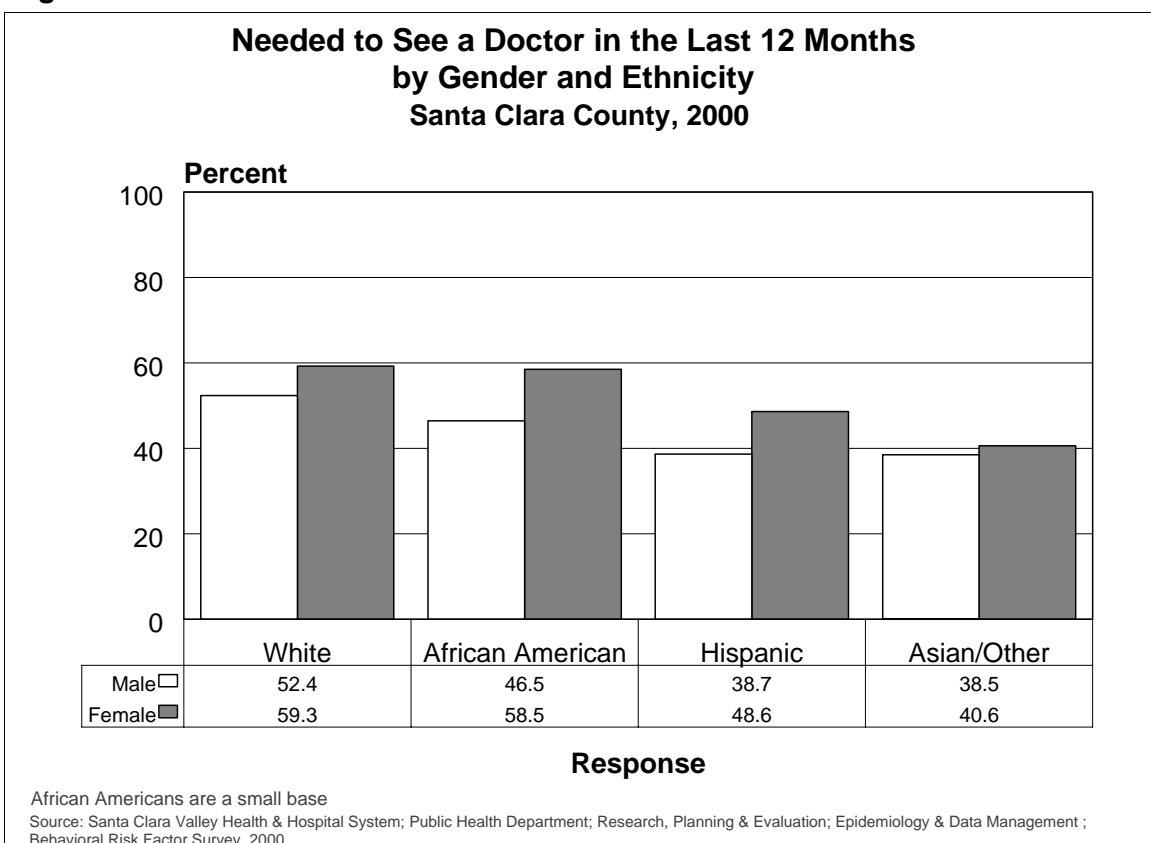
Figure 9

According to responses collected in the BRFs from Santa Clara County residents in 2000, almost 50% of the respondents needed to see a doctor in the last 12 months (Figure 9).



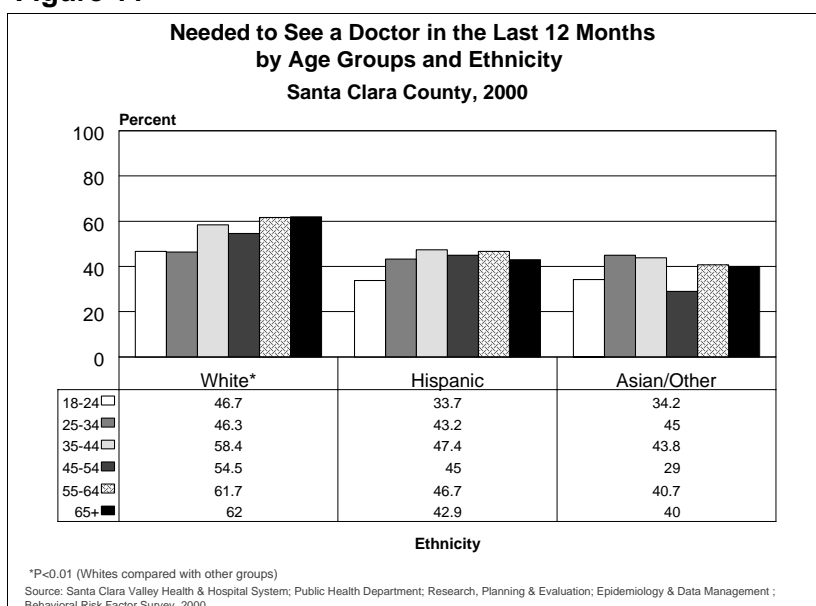
A higher proportion of women (52.4%) reported needing to see a doctor in the last 12 months than men (45.8%) across all age and ethnic groups, as seen in Figures 10 and 12. Additionally, a higher percentage of Whites (55.5%) reported visiting the doctor in the last 12 months than Hispanics and Asian/others.

**Figure 10**

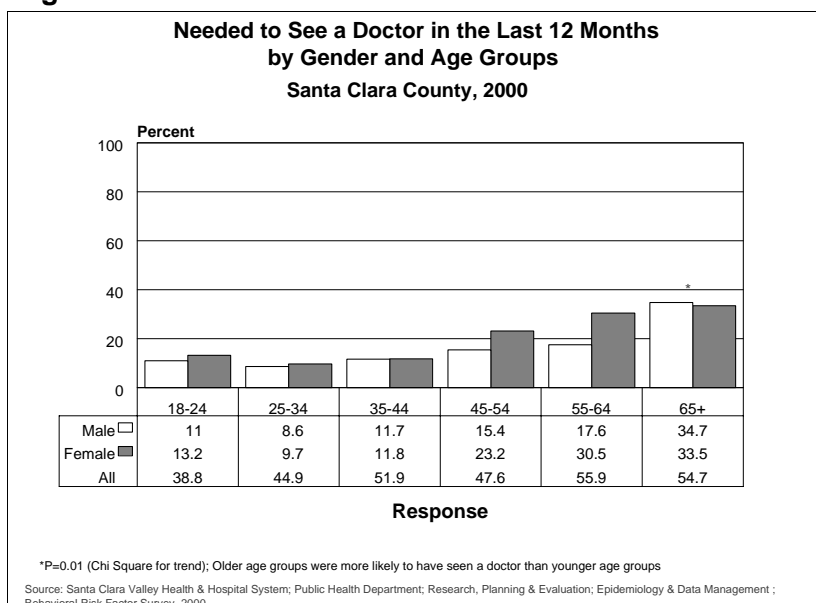


Further analysis revealed that more respondents between 35 and 44 years and those older than 55 years old also reported having seen a doctor in the last 12 months than other age groups (Figures 11 and 12). In contrast, lower proportions of Hispanics (56.4%) and Asian/others (60.5%) reported seeing a doctor in the past 12 months than other ethnic groups. Hispanic males (38.7%, CI: 33.1 – 44.4) also reported fewer doctor visits than males of other ethnicities (47.5%, CI: 44.3 – 50.6). However, there were no significant differences of proportions between Hispanic males and females (data not shown).

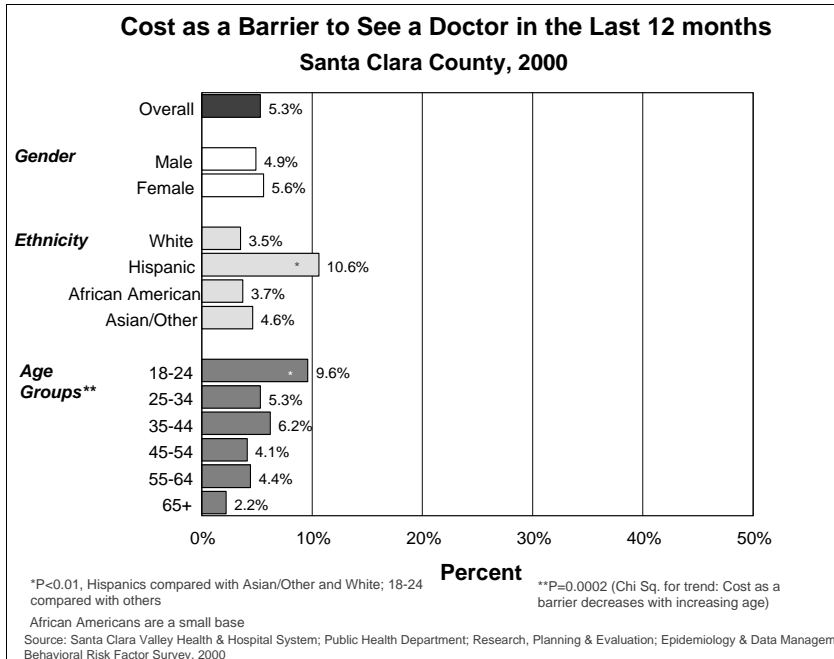
**Figure 11**



**Figure 12**

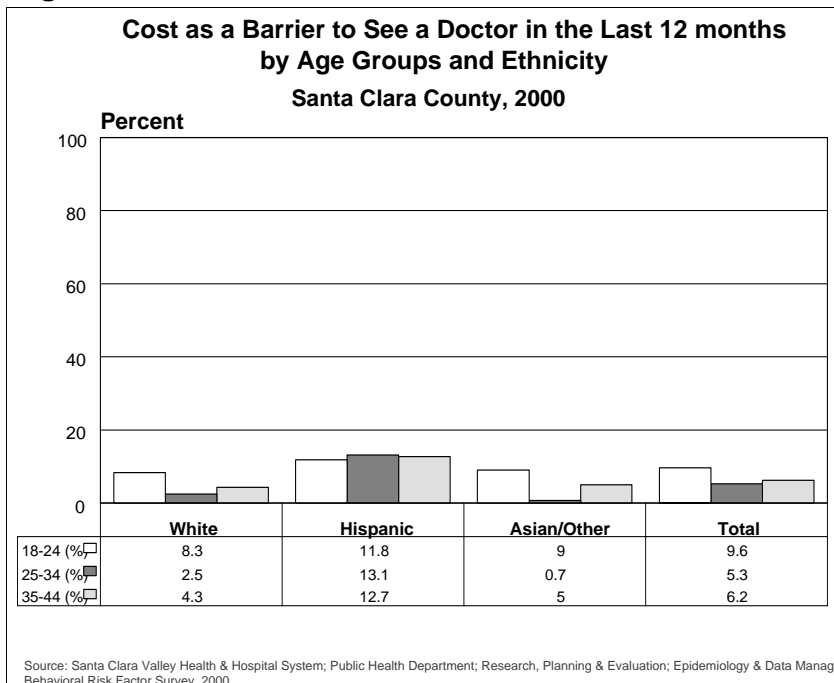


**Figure 13**



The Healthy People 2010 target of reducing barriers to accessing healthcare to 7% has been achieved in Santa Clara County. According to data gleaned by the survey, about 5.3% of the respondents (no difference between genders) felt they could not see a doctor in the last 12 months because of cost (see Figure 13).

**Figure 14**



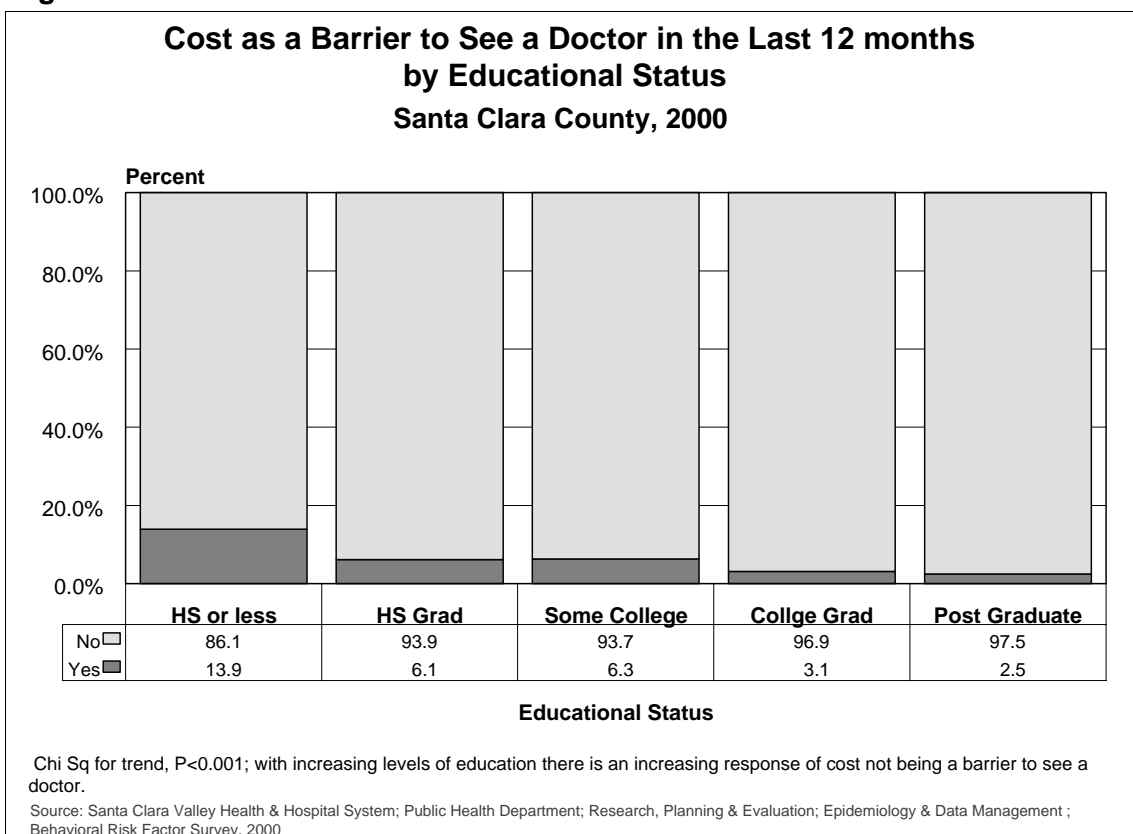
In addition to achieving this 2010 objective, the overall percentage of individuals claiming cost as a barrier to seeking healthcare was lower in Santa Clara County than the state (12.8%) and the rest of the country (9.9%).

More Hispanics and younger adults reported that high costs were a hindrance to seeking healthcare in SCC than other respective subgroups (Figure 13 and 14).

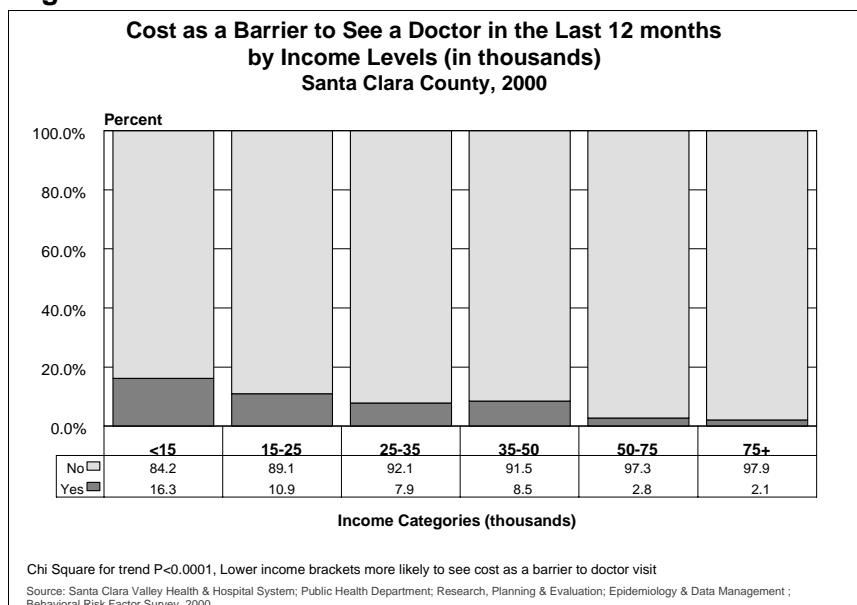
Cost as a barrier to receiving health services was consistent with national trends. According to Weinick et al (1997), as cited in the Healthy People 2010 report (DHHS, 2000), families experience barriers to care for a variety of reasons. Such barriers include (1) the inability to afford healthcare (60%); (2) insurance-related causes (20%), such as the insurance company not approving, covering, or paying for care, preexisting conditions for which insurance coverage often is restricted, lack of access to required referrals, and clinicians refusing to accept the family's insurance plan; and (3) other problems (21%), such as transportation, physical barriers, communication problems, child care limitations, lack of time or information, or refusal of services.

Variables associated with respondents' reporting "cost as a barrier" to visiting a doctor for healthcare services in the past 12 months included not being married (8.2%, 95% CI: 6.5-9.9; Data not graphed), receiving less years of education (Figure 15), having lower incomes (Figure 16), not having health insurance (11 times greater odds than those who have health insurance), being Hispanic, and being in younger age groups.

**Figure 15**

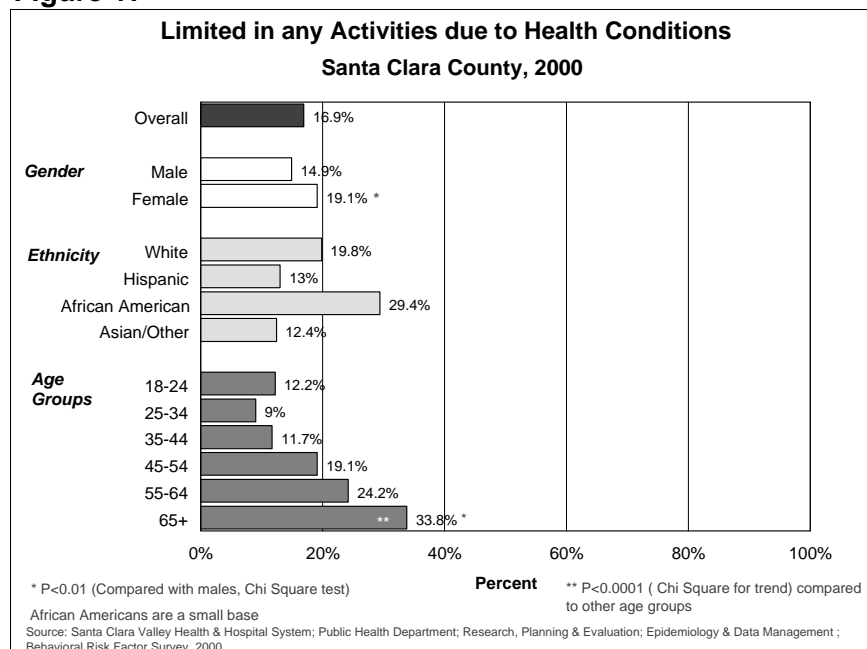


**Figure 16**



The importance of reducing barriers to doctor visits is reinforced by the fact that 16.9% of respondents claimed they were limited in their activities due to impairment or health problems. As seen in Figure 17, women (19.1%; 95%CI: 16.9-21.2), African Americans (29.4%, 95% CI: 19.5-38.7), Whites (19.8%; 95% CI: 17.6-21.9) and those 65 years and older (33.8%, 95% CI: 28.6-38.7) represented the highest proportions of individuals who claimed that they were limited in their activities due to impairment or health problems.

**Figure 17**





A higher proportion of women 45 to 64 years old reported that they were limited in activities due to impairment or health problems than men in the same age range. Additionally, more African Americans age 35 to 54 years old reported experiencing limited activities due to health problems than other ethnic groups in the same age range, whereas more Whites 18 to 24 years old were limited in their activities due to health reasons than other respective subgroups (data not shown).

Table 3 lists some of the major impairments or health problems that respondents identified: Back or neck problems, fractures, walking problems, arthritis, and problems with vision. More women reported arthritis and more men reported vision problems.

**Table 3**

**Type of Impairments that Limit Activities**

**Santa Clara County, 2000**

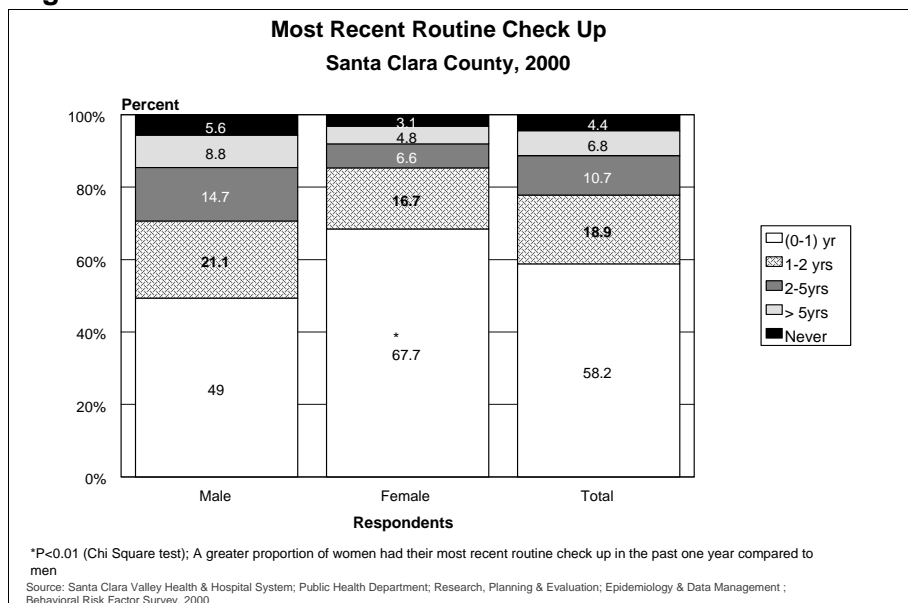
**N=438**

Type of Problem	Overall (%)	Men (%)	Women (%)
Back or neck	17.0	17.0	17.0
Fractures	14.0	16.1	12.3
Arthritis	10.6	6.5	<b>13.9</b>
Walking Problem	4.8	3.3	6.0
Vision	5.0	<b>7.9</b>	2.7
Lung/Breathing	4.3	4.1	4.5
Diabetes	3.5	5.4	1.9
Heart Problem	3.2	4.2	2.5
Stroke	2.5	4.4	1.1
Hypertension	1.8	2.5	1.3
Depression	1.9	1.9	1.9
Other	28.2	23.5	31.9

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

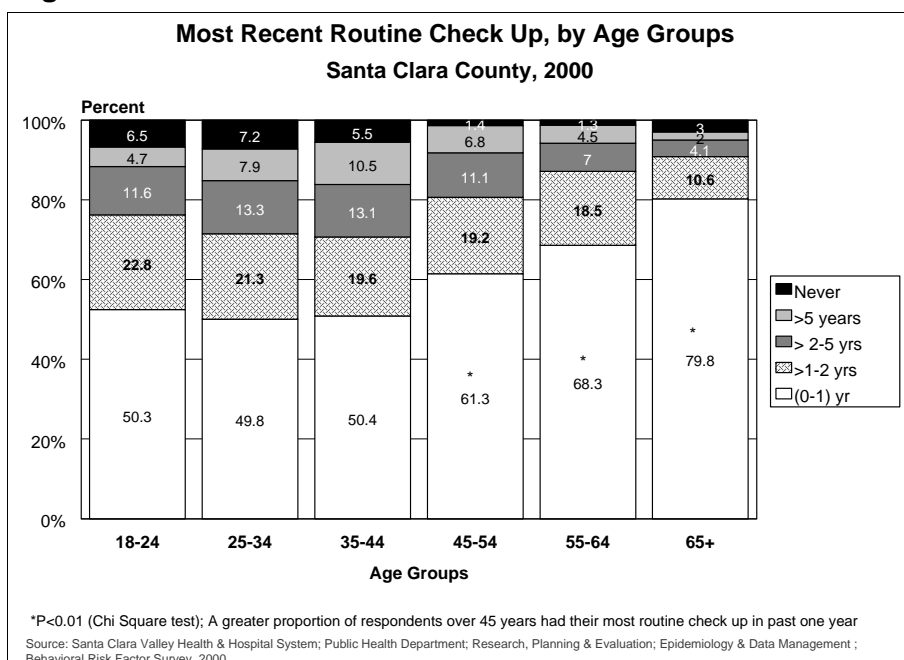
Visiting a doctor for a routine checkup is a recommended practice for prevention and timely diagnoses. Overall, 58.2% of respondents reported receiving a routine medical checkup within the past 12 months (Figure 18), while 18% received a checkup between 1-2 years ago. More women (67.7%) had a routine medical checkup than men (49%), especially African American and Hispanic females (data not shown).

**Figure 18**



Respondents over the age of 45 were more likely to have received a routine checkup in the past 1 year as compared to the other age groups (Figure 19). About 4.4% of the respondents never received a routine medical examination. In general, more males, respondents between 18 and 44 years, and Hispanics and Asian/others reported never receiving a routine medical checkup than others in their respective categories, as shown in Figures 18, 19, and 20.

**Figure 19**



Possible factors to obtaining routine medical checkups in the past 12 months are:

- **Income:** Although there was a difference between the proportions of respondents who never went to a doctor for a routine checkup across income levels, there was no significant direct association between income levels and going to the doctor for a routine checkup.
- **Health Insurance:** The proportion of respondents receiving a routine health exam in the last year was higher among those who had health insurance than those who did not have health insurance (Figure 21)
- **Education:** Level of education was not associated with obtaining routine checkups. However, the proportion of respondents who never went to a doctor decreased with increasing levels of education.
- **Age and gender:** More women across all age groups reported going to a doctor in the past year for a routine checkup.
- **Age and ethnicity:** By far, African Americans surpassed other ethnicities in all age groups in responding positively to seeing a doctor for a routine checkup in the past year. However, the number of African Americans surveyed for these questions were small so results may not reflect actual trends among this ethnic group. Asian/others reported the second highest proportion of receiving routine checkups, except for the 65 and over age group, in which Whites reported the second highest proportion.

**Figure 20**

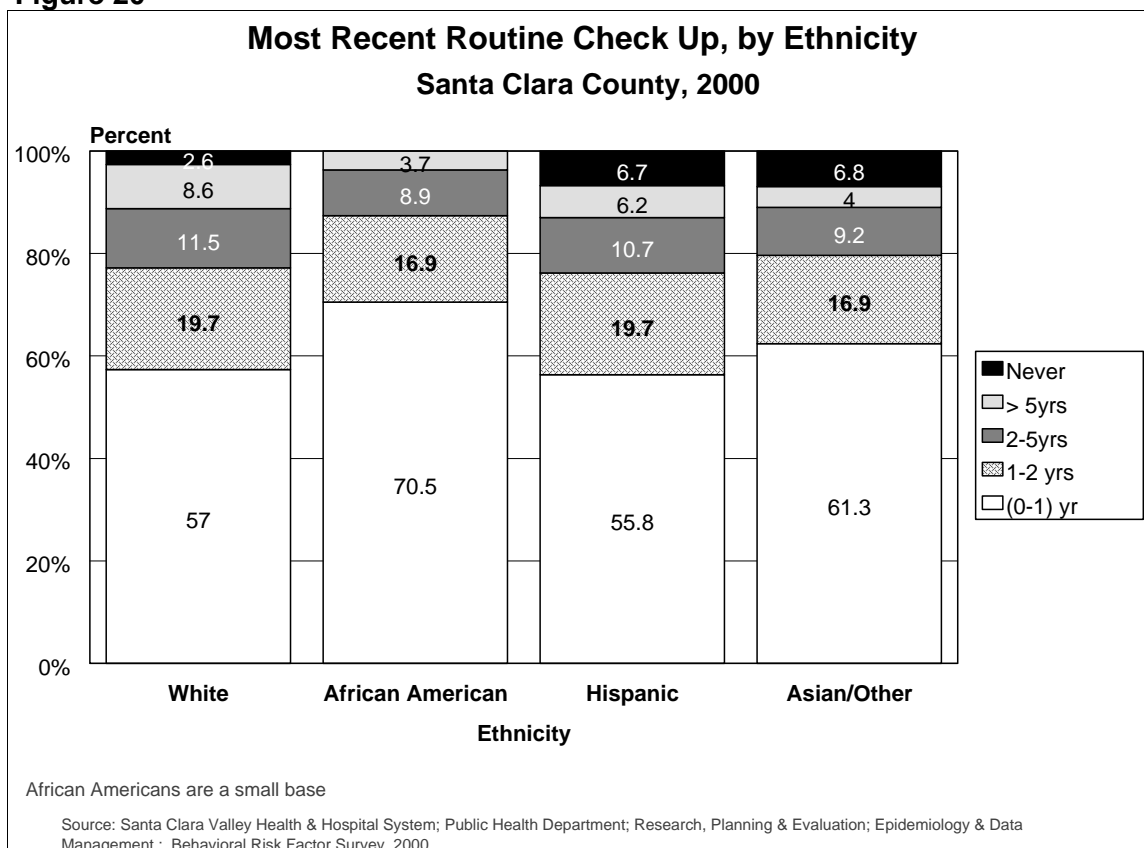
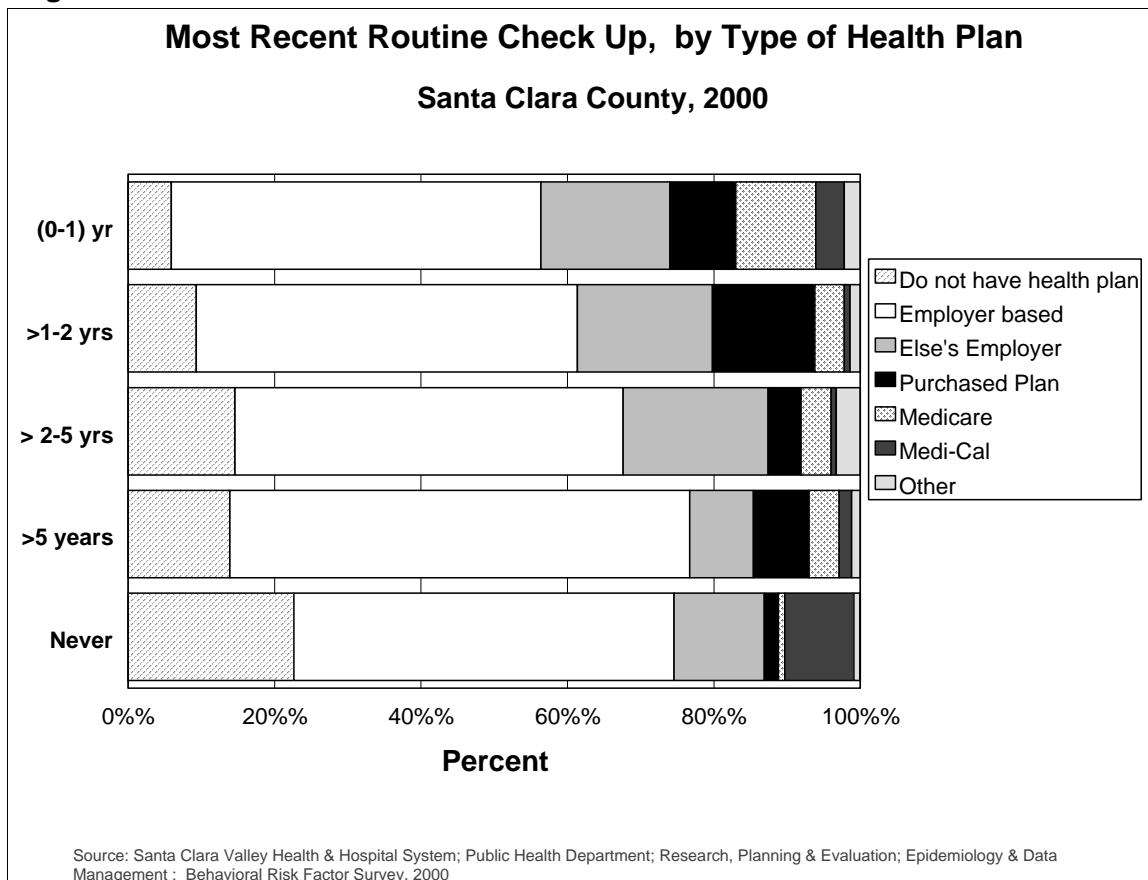


Figure 21



Santa Clara County's statistics follow the general trend seen in the nation and in California with regard to frequency of doctor visits. An average of two thirds of the population in Santa Clara County, California, and the nation has visited their primary care provider within the past year. A small percentage (4%) reported never having visited a doctor and 22% reported not utilizing their primary care provider for over 2 years. Again, lack of health insurance poses a barrier to seeking healthcare, not only in Santa Clara County, but throughout the state and nation as well.

### **Summary of Key Findings for Doctor Visits**

Nearly half the respondents reported needing to see a doctor in the past year; the proportion of those who needed to see a doctor was higher among older age groups, women, and Whites. Moreover, almost 60% of respondents, mostly women, had received a routine checkup. Approximately 17% of respondents reported that they were limited in activities due to health problems or impairments, such as arthritis, back or neck problems, fractures, and problems with walking.

Only about 5% felt that they could not see a doctor because of cost, which meets the Healthy People 2010 target of reducing the proportion of the population claiming barriers to seeking healthcare to 7%. Respondents who had difficulty accessing healthcare due to cost were mostly young Hispanics, those who did not have health insurance, had lower household income, had less than a high school education, and were not married.

In comparison to BRFs 1997 results, significantly fewer survey respondents needed to see a doctor for an illness or injury in the past 12 months in 2000. Furthermore, fewer survey participants reported high costs as a barrier to seeking healthcare in the BRFs 2000 than in 1997. More participants in 2000 also received routine physical checkup within the past 5 years compared to 1997. A comparison of 1997 and 2000 BRFs results are available in Appendix A.

Although Santa Clara County residents generally fare better in receiving preventive healthcare than residents in the rest of the state and nation, more efforts towards reducing barriers, such as costs, need to be addressed, especially among groups where health disparities are observed.

## overweight/obesity

The American Obesity Association website (n.d.) describes obesity as a complex, multi-factorial chronic disease involving environmental (social and cultural), genetic, physiologic, metabolic, behavioral and psychological components. As the second leading cause of preventable death in the U.S, public health leaders recognize obesity as a neglected public health problem. An estimated 120 million adults in the U.S. are overweight or obese, making this a national epidemic. Categorically, about 69 million adults are overweight (defined as a body mass index [BMI] between 25 and 29.9) and 51 million are obese (defined as a BMI of 30 or greater) (DHHS, 2000).

In addition to the negative stigma obese and overweight individuals may experience, obesity and overweight are associated with many diseases and are contributing factors to many preventable causes of death. As weight increases, so does the prevalence of health risks. Associated conditions include increased risk for high blood pressure, Type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, and some types of cancer. In spite of this, the Healthy People 2010 report (DHHS, 2000) notes that health outcomes related to these diseases often can be improved through weight loss or, at a minimum, no further weight gain. A healthy diet and regular physical activity are both important for weight loss or maintaining a healthy weight. It is recommended that obese individuals who are trying to lose substantial amounts of weight seek the guidance of a healthcare provider.

### Healthy People 2010 Goal and Objectives: Overweight/Obesity

Goal: Promote health and reduce chronic disease associated with diet and weight		
Objectives		Target
1-3a	Increase the proportion of persons appropriately counseled about physical activity or exercise (adults age 18 years and older)	Developmental
1-3b	Increase the proportion of persons appropriately counseled about health behaviors: Diet & nutrition (age 18 years and older)	Developmental
19-1	Increase the proportion of adults who are at a healthy weight	60%
19-2	Reduce the proportion of adults who are obese	15%

The Healthy People 2010 goal and objectives for reducing overweight and obesity focus on increasing the proportion of adults who are at healthy weight to 60%. National statistics, which were age-adjusted to the year 2000 standard population, reported that 42% of adults age 20 years and older were at a healthy weight (defined as a BMI equal to or greater than 18.5 and less than 25) between 1988 and 1994.

Data presented in Tables 4 and 5 present the proportion of healthy weight and obesity between Santa Clara County BRFs participants and the rest of the nation, and how they compare with the Healthy People 2010 target objectives. It is important to note that the statistics presented for SCC BRFs 2000 were also age-adjusted to the year 2000 standard population to allow comparison with the nation's statistics. Hence, SCC statistics in Tables 4 and 5 differ from the non-adjusted SCC BRFs 2000 statistics presented in the remainder of the section.

**Table 4**

**Proportion of U.S. Adults and SCC BRFs Respondents at a Healthy Weight**

HP 2010 Target	60% of the Proportion of Adults at a Healthy Weight		
	Overall	Males	Females
US (1998)	42%	45%	38%
SCC (BRFS 2000)	37.2%	31.1%	42.9%

**Table 5**

**Proportion of U.S. Adults and SCC BRFs Respondents Who are Obese**

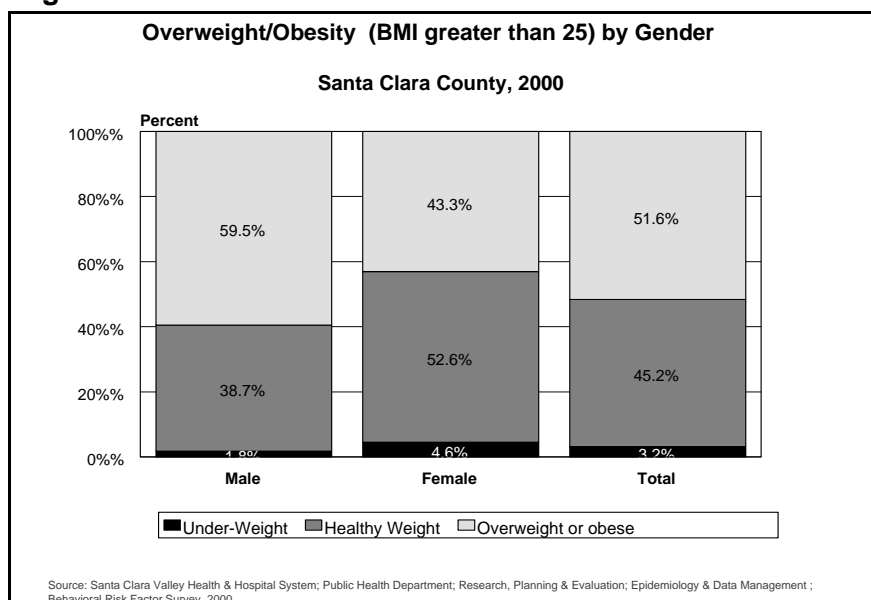
HP2010 Target	15% of the Proportion of Adults Who Are Obese		
	Overall	Males	Females
US (1998)	23%	20%	25%
SCC (BRFS 2000)	15.1%	14.1%	15.8%

Nationally, 42% of adults over 20 years of age were at a healthy weight; 45% men and 38% women. In Santa Clara County, only 37.2% were at a healthy weight; 31% men and 43% women (Table 4). On the other hand, SCC residents were well below the prevalence rate of obesity in the country, including obesity rates for males and females (Table 5). Since only 15% of SCC residents were obese and 37.2% were overweight, it may be deduced that almost half of SCC adults were overweight at the time of the survey. It can also be deduced that less than half of adults surveyed in the nation were overweight, leading to the assumption that more SCC adults were overweight as compared to adults in the nation.

### Data Analysis of BRFs Responses for Overweight/Obesity

Results from the survey showed that 45.2% of all respondents were at a healthy weight at the time of the survey, based on their reported height and weight used to calculate BMI (see Figure 22), which is below the Healthy People 2010 target rate of 60%. Approximately 52.6% of women and 38.7% of the men were at a healthy weight.

**Figure 22**



Additionally, 51.6% of the respondents were either overweight or obese. Significantly more men (59.5%) were either overweight or obese at the time of the survey than women (43.3%). Further analysis distinguished that 35.4% of the respondents were overweight, while 16.4% were obese. Among women, 26.1% were overweight and 17.2% were obese. Among men, the proportions were 44.2% and 15.4%, respectively.

Figure 23 illustrates the proportion of respondents who were overweight or obese by gender, ethnicity, and age groups, using BMI calculations. The highest proportion of respondents who were overweight or obese across ethnic groups were African Americans (69.2%), followed by Hispanics (65.4%), and Whites (52.2%). Asian/others were at the least risk for being overweight with approximately 35.5% reporting an overweight BMI. These results are comparable to the state and national averages (California Department of Health Services and Public Health Institute (2000)).

When stratifying obese and overweight respondents by age group, there was a statistically significant linear relationship between increasing age and increasing risk of being overweight or obese. The odds of being at risk for obesity and/or overweight was 2.5 times higher for respondents 65 years or older compared to respondents 18 to 24 years. Among men and women who were at risk for being overweight or obese, ethnicity and age group distributions were similar (data not shown).



Figure 23

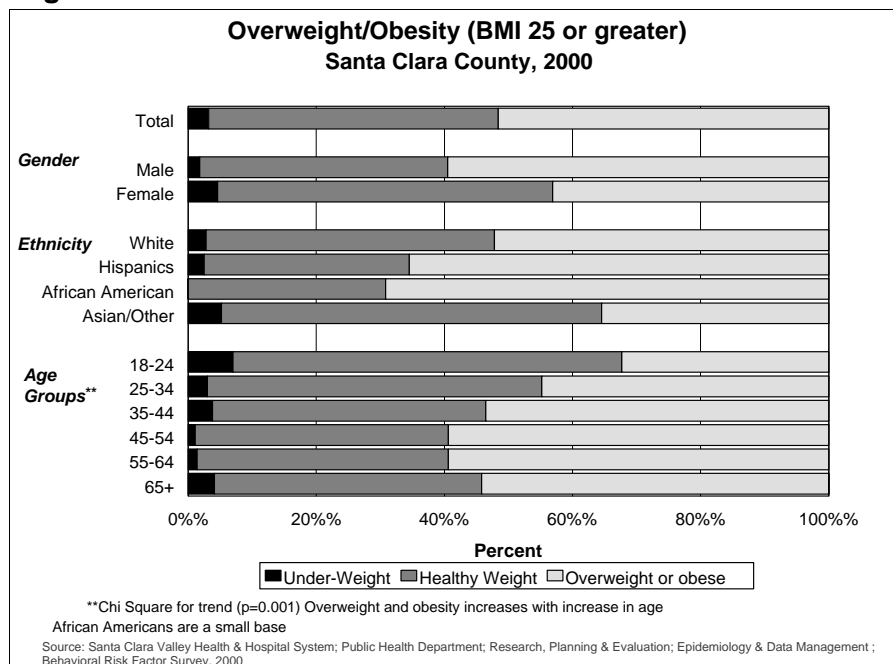


Figure 24 illustrates that when the results are stratified by gender and ethnicity, the risk of males being overweight/obese was highest among Hispanics, followed by Whites. On the other hand, females at risk for being overweight/obese were highest among African American followed by Hispanic groups. However, it is important to note that the proportion among African-Americans may not be accurate because of the small numbers represented in the survey and should be interpreted with caution.

Figure 24

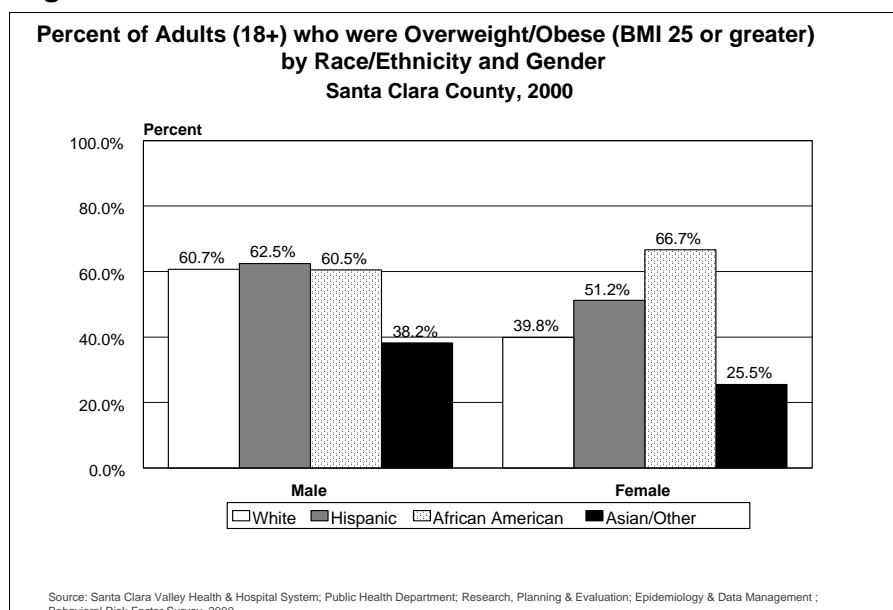
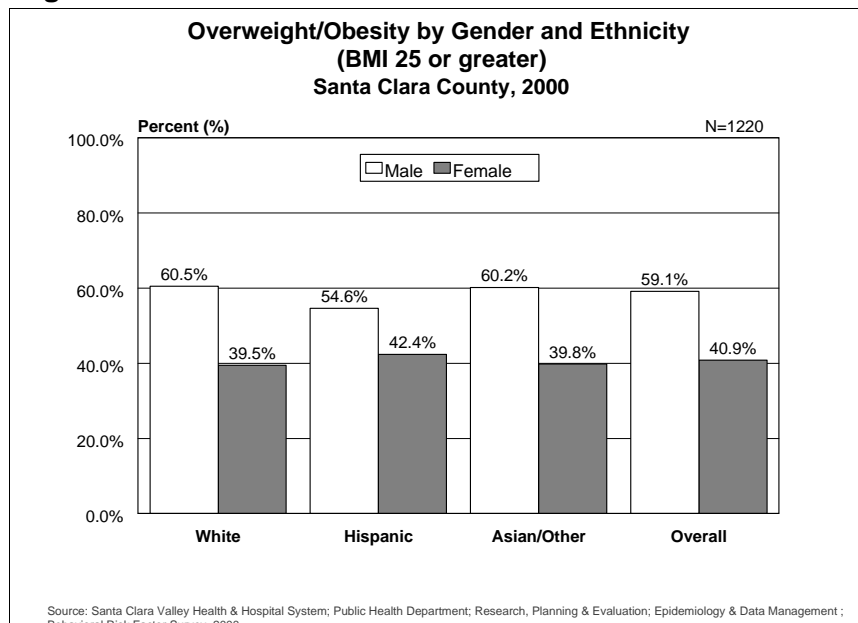
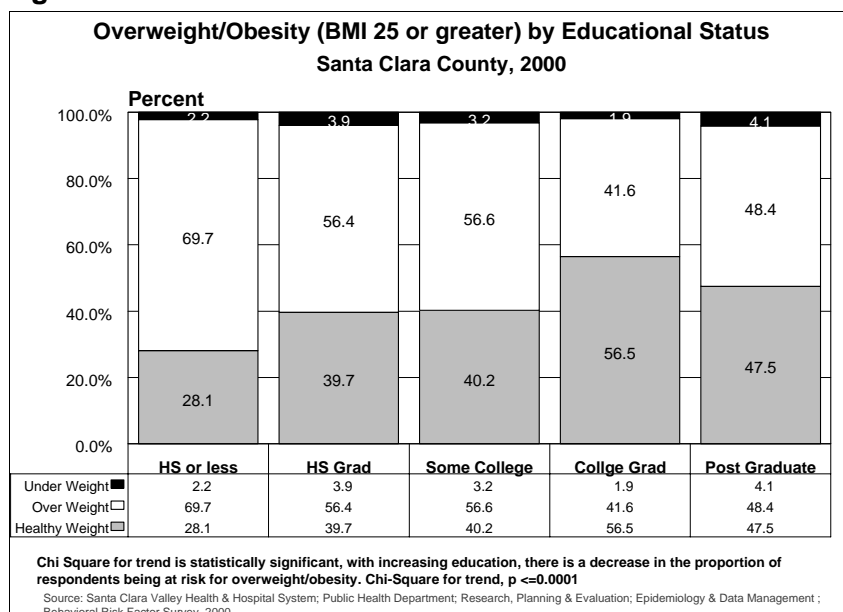


Figure 25

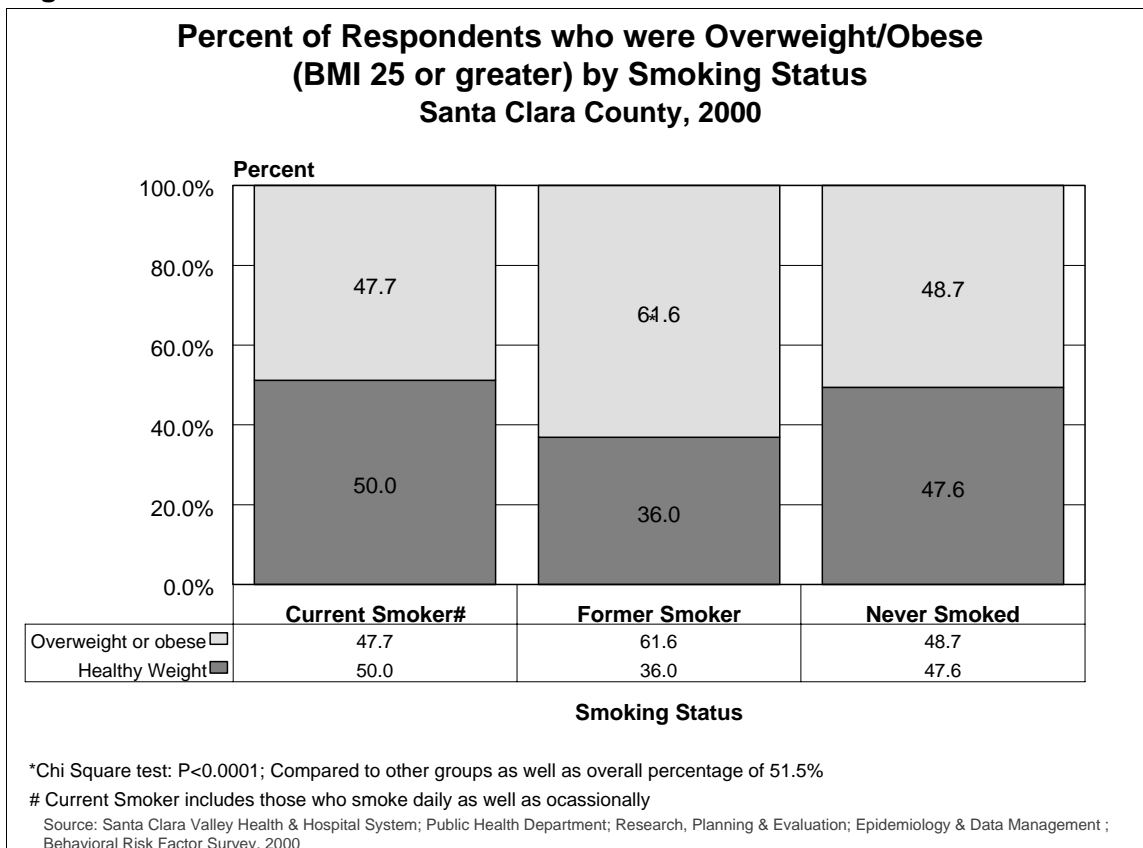


Males were more likely to be overweight/obese than females, irrespective of their ethnicity (Figure 25). The odds of being overweight or obese decreased with increasing years of education ( $p < 0.001$  Chi Square for trend) (Figure 26). Respondents who were at least college graduates were 30% less likely to be overweight/obese compared to those who had less than a high school education. Other factors, such as marital status, income level, having an insurance plan, or cost as a barrier to seeing a doctor did not influence the risk for overweight or obesity.

Figure 26

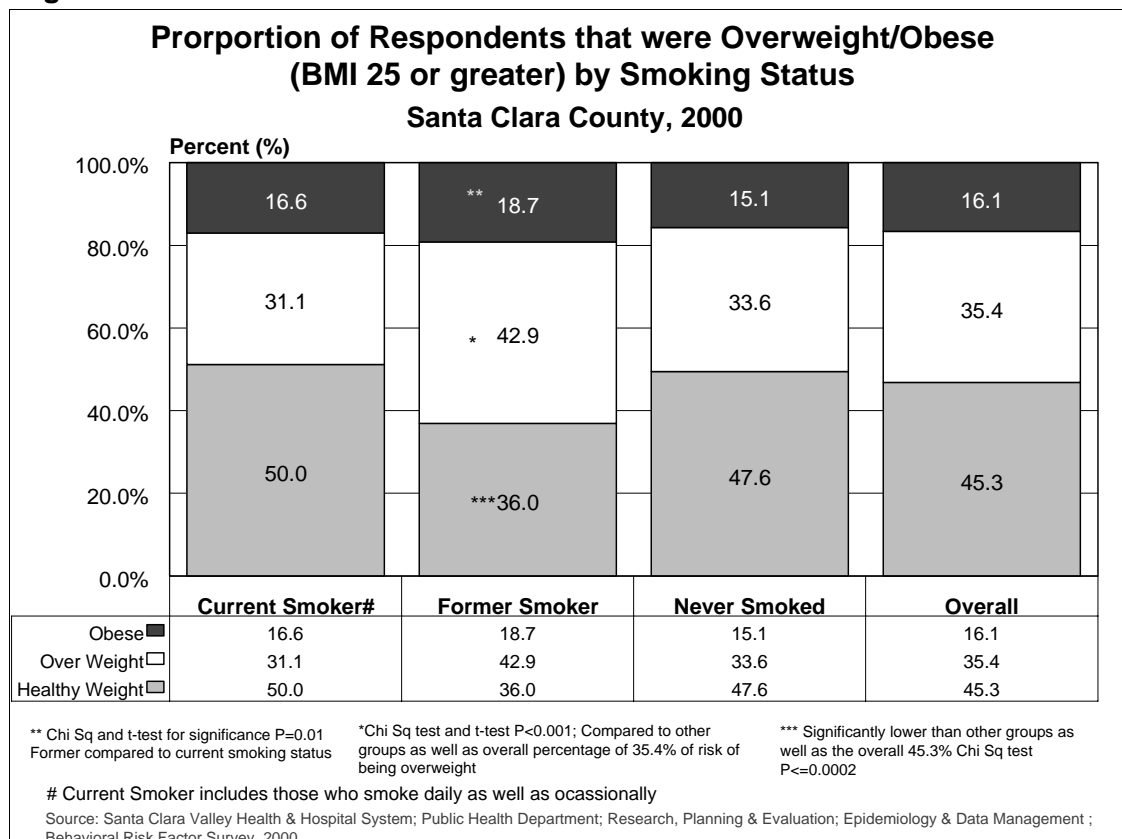


**Figure 27**



Among those who were overweight/obese, 9.4% were current smokers, 22.7% were former smokers, 5.4% were irregular smokers, and 62.5% reported to have never smoked (data not graphed). There was no difference ( $p=0.8$ ) in the proportion of individuals who were overweight/obese between those who never smoked (48.7%) and those who were current smokers (47.7%). However, among former smokers, a significantly ( $p < 0.001$ ) higher proportion of individuals were overweight/obese (61.6%, 95% CI: 57.4, 65.7) compared to other groups as well as compared to all respondents in the survey (51.6%, 95% CI: 49.5, 53.5).

**Figure 28**



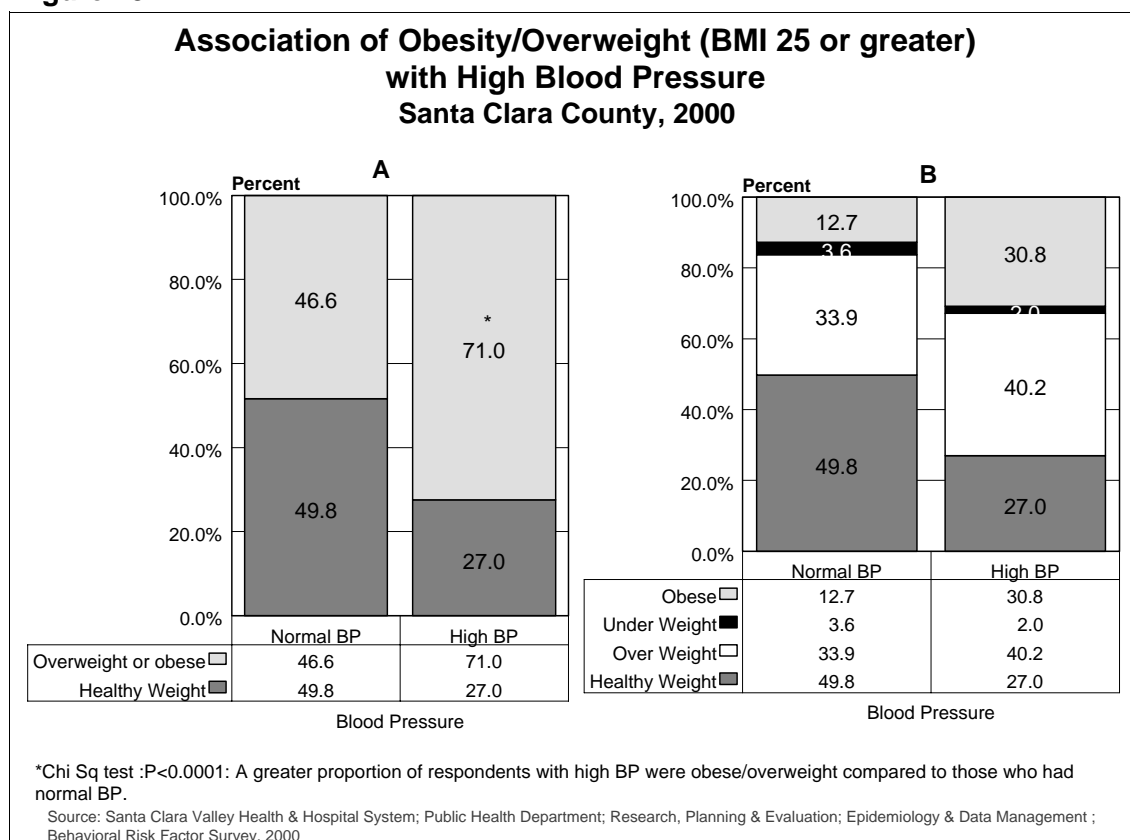
When overweight and obesity categories were examined separately, a higher proportion of former smokers (42.9%) were overweight as compared to other groups (see Figure 28). A similar trend was observed for obesity, in which a greater proportion of former smokers (18.7%) were obese compared to current smokers. In addition, former smokers had a lower likelihood of maintaining a healthy weight as compared to others.

Some chronic diseases are correlated with being overweight or obese. Behavioral practices such as maintaining a healthy diet and exercise routine has been shown to reduce prevalence of chronic diseases such as high blood pressure, diabetes, and arthritis, among others. Responses ascertained in the BRFSS were cross-tabulated against BMI to see if these already established associations held true among this survey sample.

### Correlation of Overweight/Obesity with Blood Pressure

Respondents who were obese or overweight were three times (OR = 3.5, CI: 2.4-3.9) more likely to have been diagnosed with high blood pressure compared to those who were not obese or overweight. Among respondents who were obese, 30% had high blood pressure while 13% were not diagnosed with high blood pressure. More men (77.4%, 95% CI: 71.4-83.4) with high blood pressure were obese/overweight than women (67.2%, 95% CI: 60.7-73.6) (data not graphed). Only 26% of those who had high blood pressure were at a healthy weight (Figure 29).

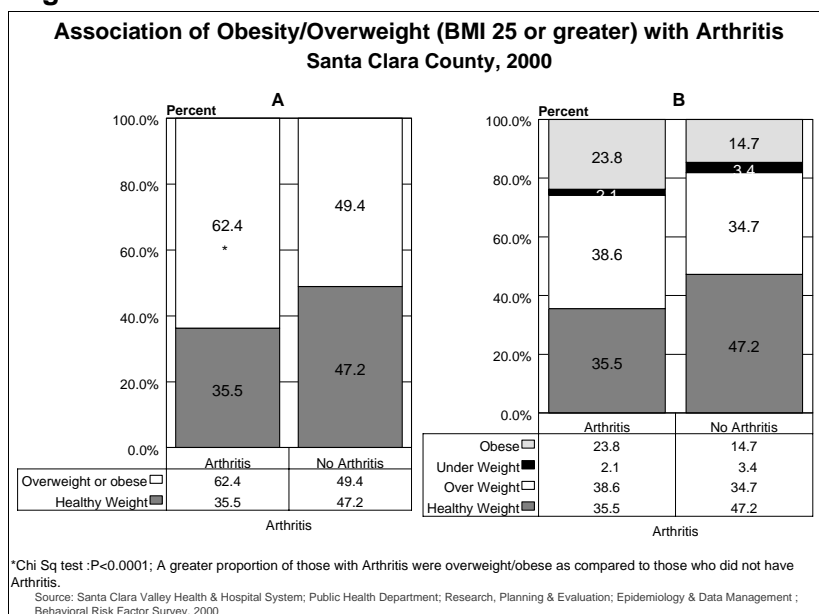
Figure 29



## Correlation of Overweight/Obesity with Arthritis

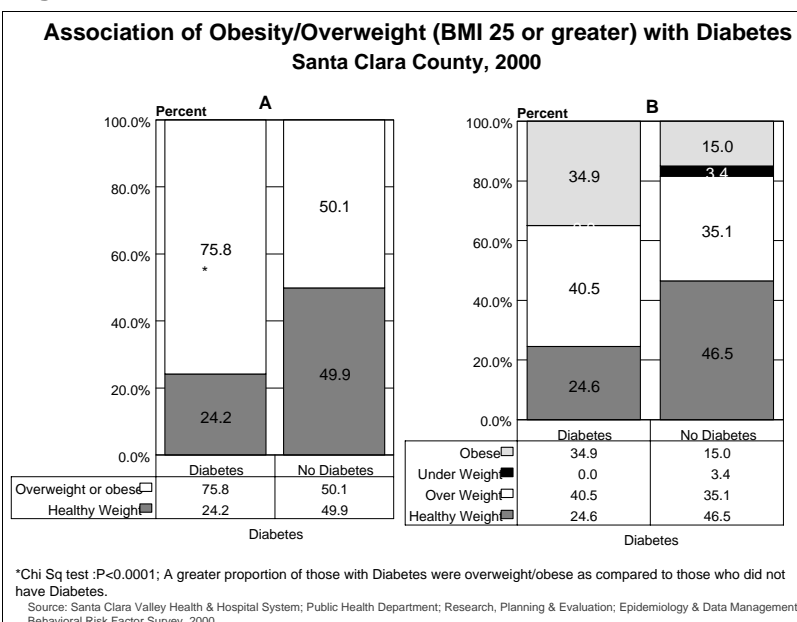
Respondents who were obese or overweight were 1.8 times (OR = 1.8, CI: 1.4-2.2) more likely to have a diagnosis of arthritis compared to those who were not obese or overweight. Furthermore, 24.8% of those who had arthritis compared to 15% of those who did not were obese (Figure 30B). Only a third of those who were told they had arthritis were at a healthy weight. More men (71.4%, 95% CI: 63.9-78.9) had arthritis and were obese/overweight than women (57.3%, 95% CI: 51.1-63.5) (data not graphed).

**Figure 30**



**Figure 31**

## Correlation of Overweight/Obesity with Diabetes

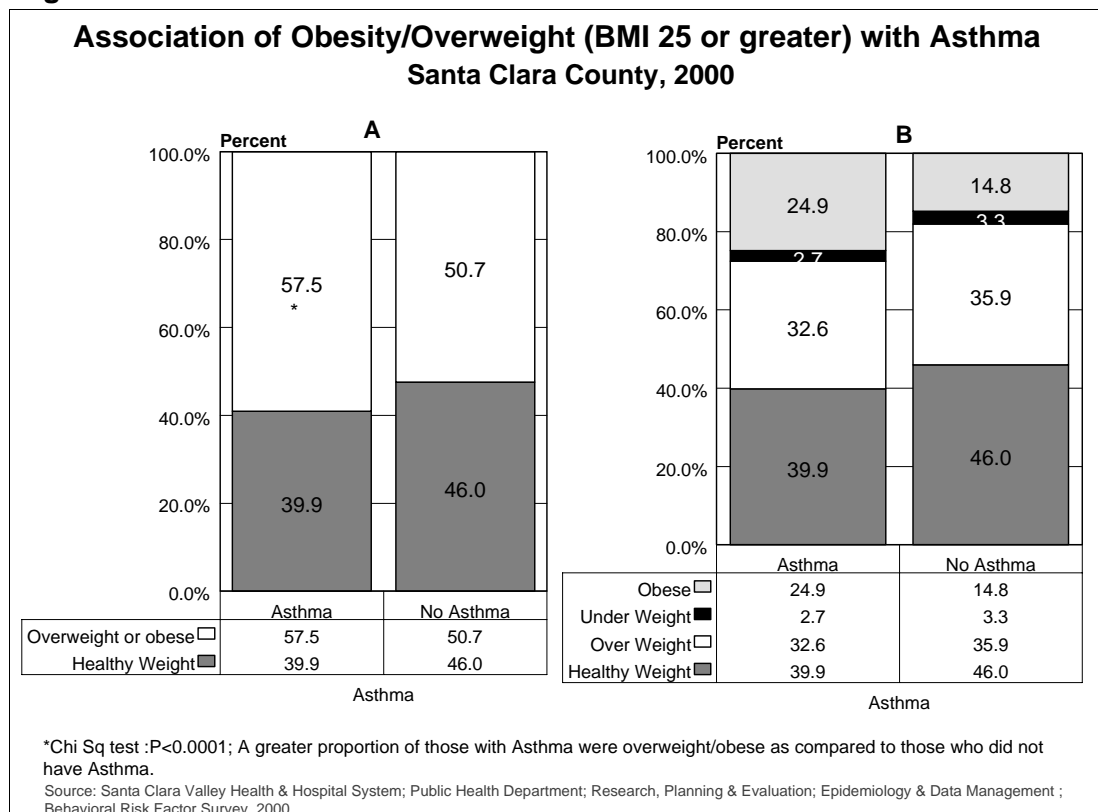


Approximately 75.8% of those who have been told that they have diabetes by a doctor were overweight/obese (Figure 31A). Only 24% of those who had diabetes were at a healthy weight at the time of the survey. More women (84.9%) who had diabetes were obese/overweight than men (68.1%) (data not graphed).

### Correlation of Overweight/Obesity with Asthma

Respondents who had asthma were 40% more likely to be for obese/overweight than those who did not have asthma (OR = 1.4, 95% CI: 1.1-1.8).

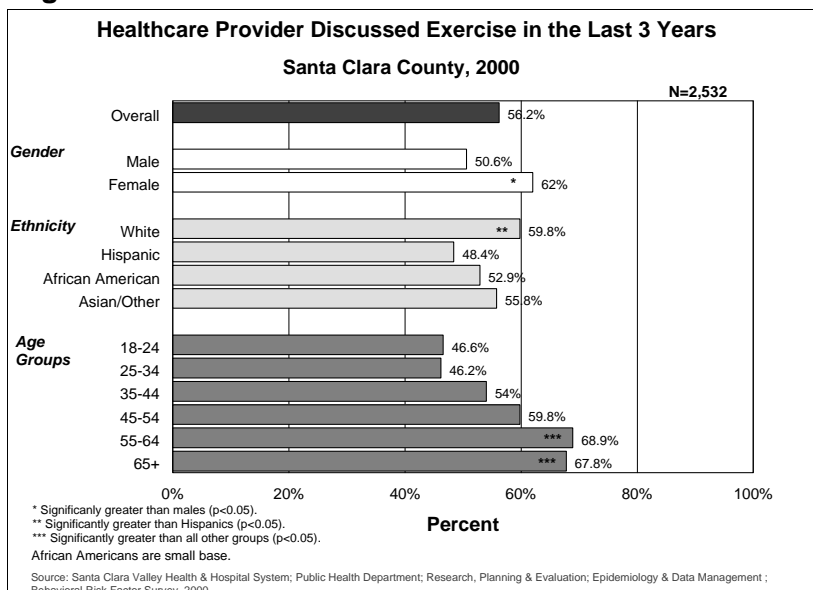
**Figure 32**



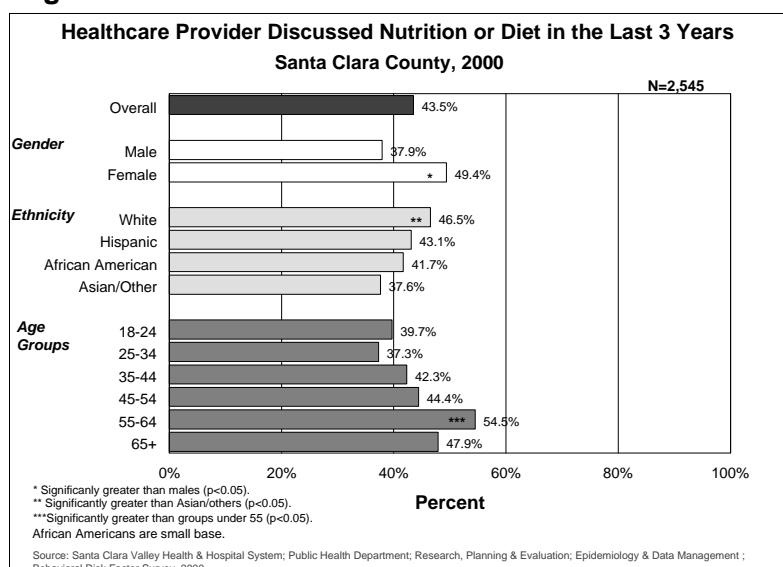
### Correlation of Overweight/Obesity with Alcohol

There was no correlation found between overweight/obesity and consumption of (or lack of) alcohol.

**Figure 34**



**Figure 33**



## Education On Preventing Overweight/Obesity

Survey respondents were also asked about health education provided by their health care provider on various issues relating to healthy practices and reducing risks for overweight/obesity. Overall, about 43.5% (37.9% males and 49.4% females) received education on diet or nutrition and 56.2% (50.6% males and 62% females) received education on exercise from their health care provider in the last three years (Figures 33 and 34). The difference found between genders could be a direct reflection of the frequency of visits to a physician.



Among overweight/obese respondents who visited a doctor in the past 3 years for a routine medical checkup, 55.8% (95% CI: 52.6, 59.0) received education on nutrition or diet, and were 1.8 times (OR = 1.8) more likely to receive education than others who were not overweight or obese. Similarly, 67.7% (95% CI: 64.4, 70.4) of overweight/obese respondents received education on exercise, and were 1.6 times (OR = 1.6) more likely to have received education than those who were overweight or obese. In contrast, 49% of all respondents (regardless of weight status) who had a routine medical checkup in the past 3 years received education on diet or nutrition (95% CI: 46.8, 51.2) and 61.9% received education on exercise (95% CI: 59.6, 63.9). These differences were marginally significant. A summary of these results is depicted in Table 6.

**Table 6**

**Summary of BRFs Survey Overweight/Obese Respondents  
Receiving Diet and/or Exercise Education**

	Diet (%)	CI	P value	Exercise (%)	CI	P value
General Population	43.5	41.6-45.4		56.2	54.3-58.2	
Male	37.9	35.2-40.6		50.6	47.9-53.5	
Female	49.4	46.6-52.1	P<0.01	62.0	59.3-64.7	P<0.01
General population with a routine checkup in the last 3 years	49.0	46.8,51.2		61.9	59.6,63.9	
Male	45.4	42.2-48.7		58.3	55.1-61.6	
Female	52.1	49.1-55.1	P<0.01	65.2	62.3-68.1	P<0.01
Among overweight/obese individuals with a routine checkup in the past 3 years	55.8	52.6,59.0	P<0.0001*	67.7	64.7,70.7	P<0.0001*
Male	52.8	48.5-57.1		63.8	59.6-68.0	
Female	59.4	54.8-64.1	P=0.05**	72.2	67.9-70.4	P=0.008**
White	60.7	56.5, 65	P=0.001 <sup>#</sup>	71.7	67.8, 75.7	P=.0005 <sup>#</sup>
Hispanic	47.9	41.5, 54.3	P=0.006 <sup>##</sup>	58.1	51.8, 64.4	P=0.0004 <sup>##</sup>
African American	37.5	23.8, 51.2		58.3	44.4, 72.3	
Asian/Other	57.3	49.4, 65.2		72.0	64.8, 79.2	

\*Those who were overweight or obese were more likely to receive educational materials on diet and exercise.

\*\*Compared to men who were overweight/obese, women were more likely to receive educational materials on diet and exercise than men.

<sup>#</sup> Whites were most likely to receive educational materials on diet and exercise compared to other groups except Asian/others.

<sup>##</sup>Hispanics were less likely as compared to whites to receive educational materials on diet and exercise.

Respondents in the BRFs were also asked how frequently they ate less because there was not enough food or money to buy food. A majority of respondents did not face this problem (90%). About 5.3% of the respondents said that they eat less 1 to 3 times per month because of financial constraints, 1.8% reported about 4 to 7 times per month, and 2.1% reported more than 7 times per month (data not graphed).

### Summary of Key Findings for Overweight/Obesity

Overall, 46.2% of respondents in SCC were at a healthy weight, which is almost 14 percentage points below the Healthy People 2010 target of 60%. Approximately 35.4% were overweight and 16.4% were obese. Most women were at a healthy weight (52.6%), whereas most men were overweight or obese (59.5%).

Asian/others were at the least risk for being overweight or obese versus other ethnic groups. Furthermore, the likelihood of being overweight/obese was reduced with increasing years of education.

Other factors found to be associated with being at risk for overweight/obesity among survey respondents were being a current or former smoker, and being diagnosed with such chronic diseases as diabetes, high blood pressure, arthritis, and asthma.

Receiving preventive health education on issues such as healthy diet, nutrition, and exercise is an important strategy for individuals to maintain a healthy weight. However, only half of all respondents received such education from their healthcare provider. This percentage was slightly higher among those who were overweight/obese.

Compared to BRFS 1997 results, significantly more survey respondents reported discussing the importance of exercise and a healthy diet with their healthcare provider in 2000. A comparison of 1997 and 2000 BRFS results are shown in Appendix A.

Although the Healthy People 2010 objectives for overweight and obesity (age adjusted rate) have not yet been achieved, SCC survey respondents were well below the nation's obesity rate (15% vs. 23% in the nation) but also below the nation's healthy weight rate (37% vs. 42% in the nation). Hence, it could be deduced that the rate of overweight individuals in SCC is higher than the nation as well. In light of these statistics, education focusing on exercise and healthy diet should be geared to those who are obese and overweight to increase the prevalence of adults with healthy weight in the county.

## arthritis

Arthritis is a condition characterized by pain, stiffness and sometimes swelling in or around the joints, muscles, tendons, ligaments, and other connective tissues of the body (DHHS, 2000). There are more than 100 different types of arthritis and the cause of most types is still unknown. Various forms of arthritis affect more than 15% of the U.S. population (more than 43 million people) and more than 20% of adults, making arthritis one of the most common conditions in the United States.

According to the CDC's Morbidity and Mortality Weekly Report (1994), as cited in the Healthy People 2010 report (DHHS, 2000), arthritis is the leading cause of disability, limiting major activities of nearly 3% of the entire U.S. population (7 million persons). Nearly 1 out of 5 people with arthritis are limited in performing personal care activities, working, housekeeping, school, and other average daily procedures. Hence, arthritis limits the independence of affected persons and potentially disrupts the lives of family members and other caregivers. Bradley et al (1998) and Frank and Hagglund (1996), both cited by the U.S. Department of Health and Human Services (2000), observe that this may also lead to negative effects on a person's mental health.

Arthritis also has a significant impact on the economy. CDC findings (1994, as cited by DHHS, 2000) concluded that arthritis is the source of at least 44 million visits to healthcare providers, 744,000 hospitalizations, and 4 million days of hospital care per year. Yelin and Callahan (1995, as cited by DHHS, 2000) also note that estimated medical care costs for persons with arthritis were \$15 billion, and total costs (medical care plus lost productivity) were \$65 billion in 1992, which is equal to 1.1% of the gross domestic product.

The significant public health impact of arthritis is realized in its cause of disability and economic burden on society. Unfortunately, trends indicate that the prevalence of arthritis will only increase.

**Healthy People 2010 Goal and Objectives: Arthritis**

<b>Goal: Prevent illness and disability related to arthritis and other rheumatic conditions, osteoporosis, and chronic back conditions</b>		
<b>Objectives</b>		<b>Target</b>
2-1	Increase the mean number of days without severe pain among adults who have chronic joint symptoms	Developmental
2-2	Reduce the proportion of adults with chronic joint symptoms who experience a limitation in activity due to arthritis	21%
2-3	Reduce the proportion of all adults with chronic joint symptoms who have difficulty in performing two or more personal care activities, thereby preserving independence	1.4%
2-4	Increase the proportion of adults age 18 years and older with arthritis who seek help in coping if they experience personal and emotional problems	Developmental
2-5	Increase the employment rate among adults with arthritis in the working-age population	78%
2-6	Eliminate racial disparities in the rate of total knee replacements	Developmental
2-7	Increase the proportion of adults who have seen a healthcare provider for their chronic joint symptoms	Developmental
2-8	Increase the proportion of persons with arthritis who have had effective, evidence-based arthritis education as an integral part of the management of their condition	Developmental

**Data Analysis of BRFs Responses for Arthritis**

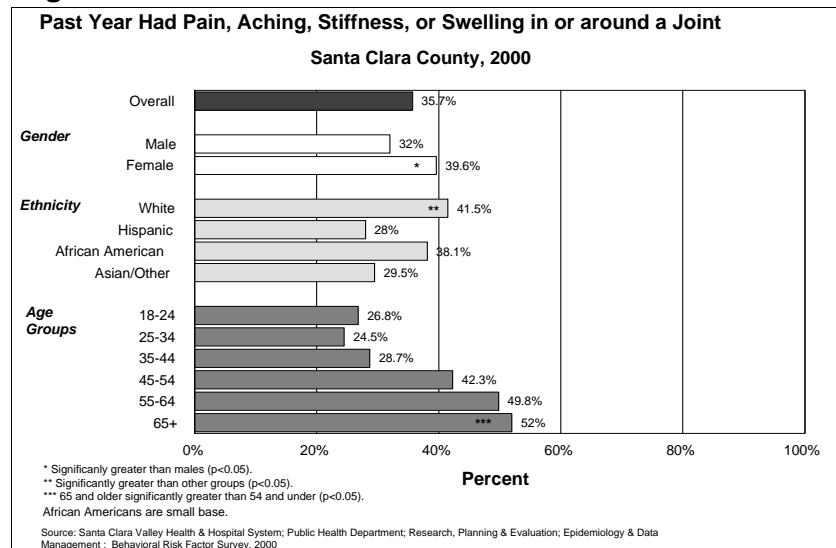
According to responses collected in the BRFs from Santa Clara County residents in 2000, 35.7% of respondents said that they had some pain, aching, stiffness or swelling in or around a joint in the past year (Figure 1). This question did not specifically ask about having arthritis, although these are symptoms of arthritis. A greater proportion of women, Whites, and adults 45 years and older reported some discomfort around a joint in the past year than their respective subgroups. It should be noted that the same size for African Americans is small and may not provide an accurate representation for the group.

Further analysis revealed more White women responded to having pain around a joint compared to White men. More younger men age 18 to 24 years reported joint pain compared to women of the same age group. In contrast, after age 34, more women reported joint discomfort compared to men. For almost all ages, a greater proportion of Whites reported having joint pain compared to Hispanics and Asian/others. However, between the ages of 55 to 64, all ethnic groups reported similar proportions of joint pain (figure not shown).

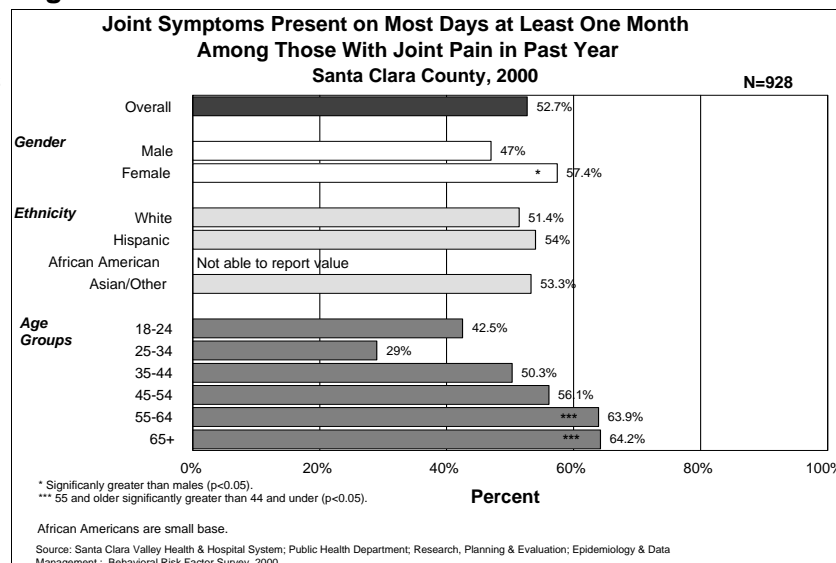
Individuals with joint pain were also asked if symptoms were present on most days for at least one month (Figure 2). 52.7% reported that symptoms were present on most days for at least one month, as seen in Figure 2. A greater proportion of women and older adults reported having joint pain in the past month compared to other respective groups.

A higher proportion of Hispanic (63.5%) women reported having joint pain on most days in a month compared to either White or Asian/other women (56.3% & 55.4%). In addition, Asian/other men (51.3%) reported frequent joint soreness more compared to either White or Hispanic men (45.1% & 43.1%). A higher proportion of Women age 18 to 24 years reported frequent joint pain in a month compared to men in the same age group. A similar trend was observed for the 35 to 44 and 55 to 64 age categories (figure not shown).

**Figure 1**



**Figure 2**



**Figure 3**

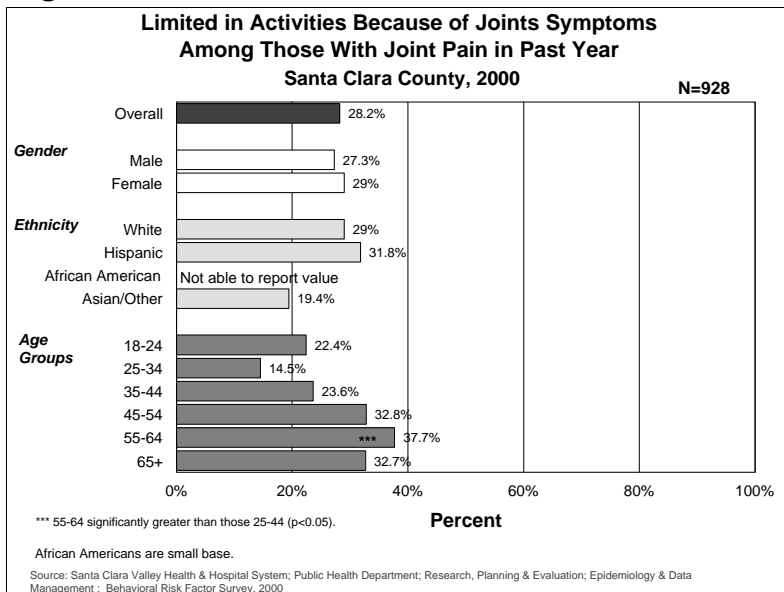


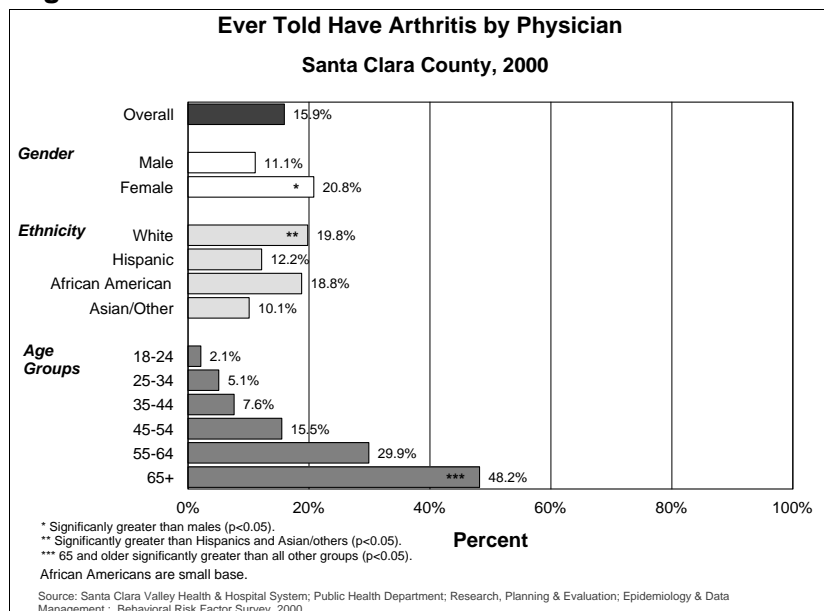
Figure 3 illustrates that 28.2% of respondents reported that joint symptoms limited them in activities, which is slightly above the Healthy People 2010 target of reducing arthritic people limited by pains to 21%. Greater proportions of respondents reporting limitations of usual activities due to arthritic symptoms were found among Whites, Hispanics, and adults 45 years and older.

A greater proportion of White women (31.1%) had activity limitations because of joint pain than Asian/other women (18.3%). Hispanics 35 to 44 years of age (44.8%) represented higher proportions of limited activities due to joint pain than Whites (19.1%) and Asian/others (19.4%) within the same age group (figure not shown).

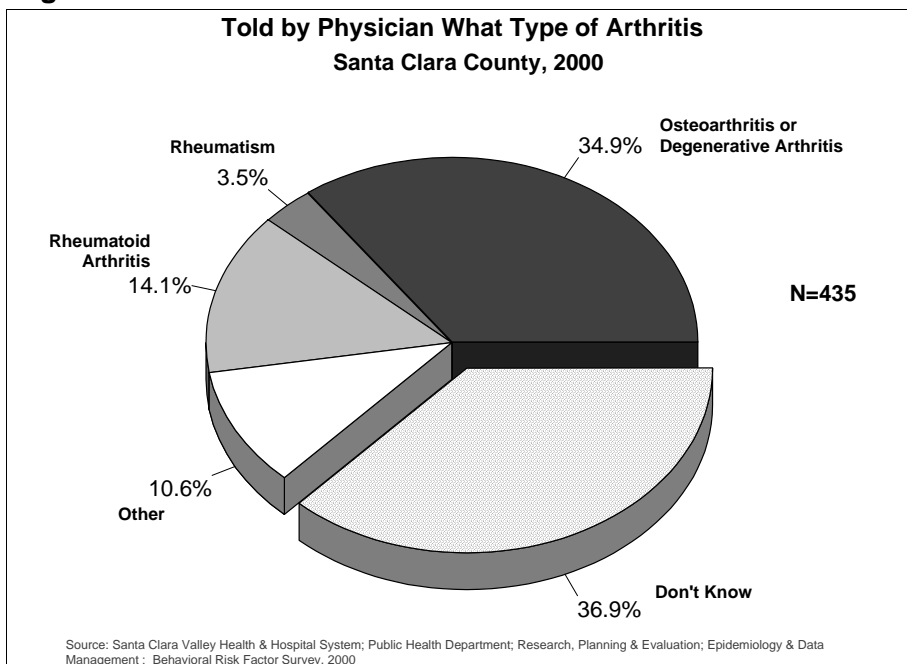
Now looking specifically at arthritis, approximately 15.9% of all respondents said a physician had told them they had this condition (Figure 4). Overall, more women, Whites, and older adults indicated that a physician had diagnosed them with arthritis.

**Figure 4**

Further analysis revealed that a greater proportion of women 35 and over had been diagnosed with arthritis compared to men in the same age group. A higher percent of Whites 35 to 54 years also reported being diagnosed with arthritis compared to Asian/others in the same age range (data not shown).



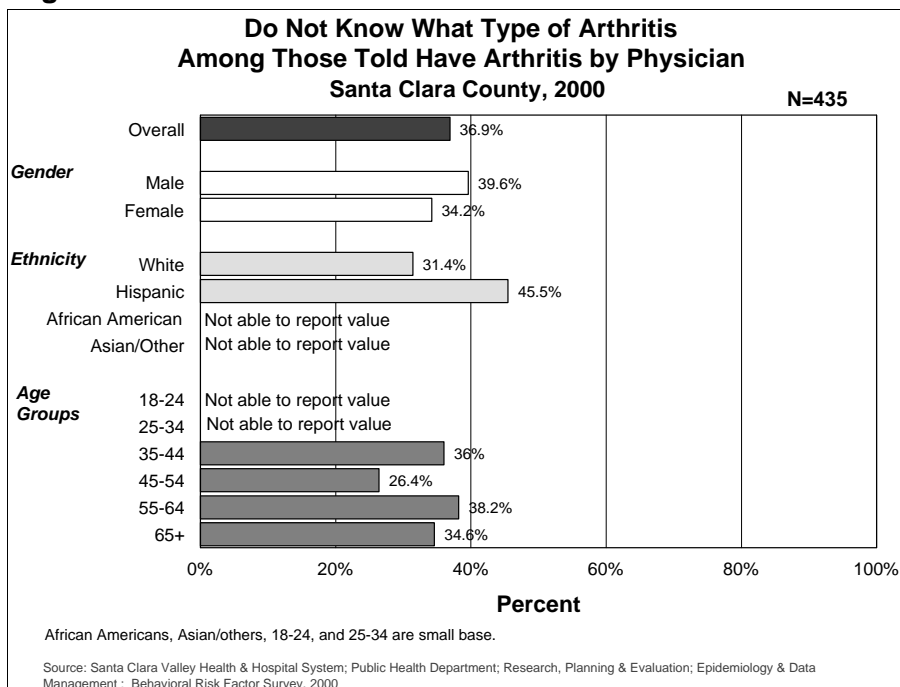
**Figure 5**



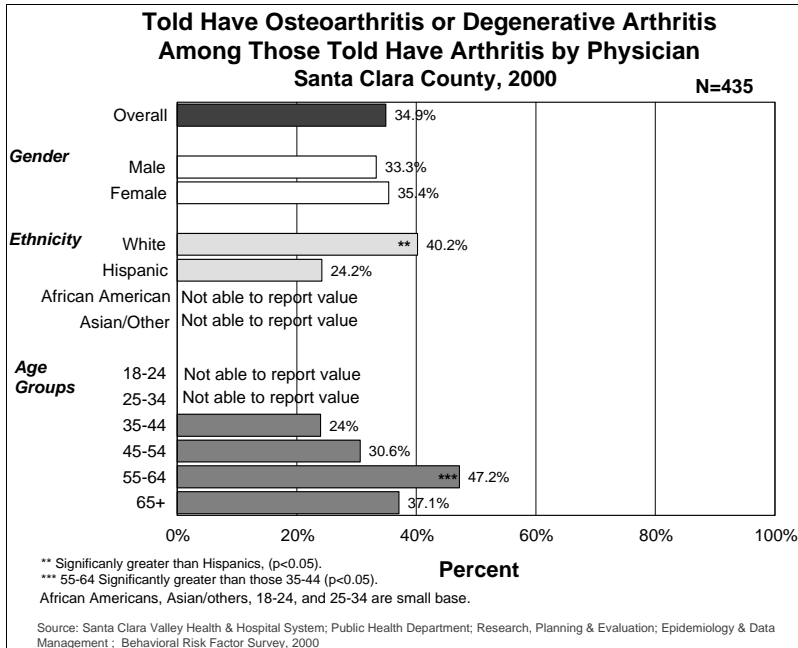
Of those diagnosed with arthritis, 36.9% could not identify what type of arthritis they had (Figures 5).

**Figure 6**

A greater proportion of Hispanics did not know their type of arthritis as compared to Whites (Figure 6). There were no other differences in responses across gender and age groups regarding knowledge of arthritis type.

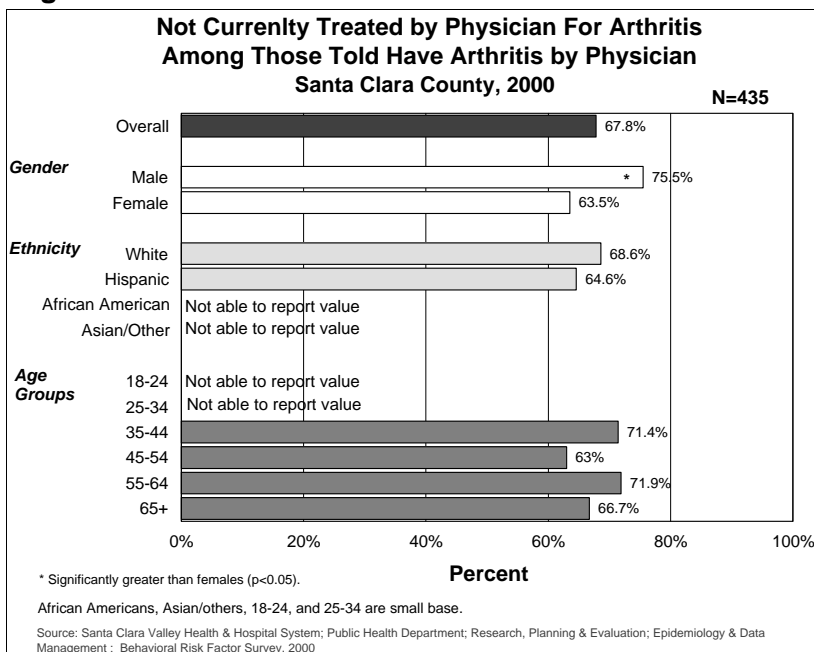


**Figure 7**



Of the respondents who knew their type of arthritis, 34.9% identified it as osteoarthritis, which is also known as degenerative arthritis (Figure 7). There was no clear difference in responses between men and women. A greater proportion of Whites identified their type of arthritis as osteoarthritis. More adults age 55 to 64 years old reported having osteoarthritis than those in other age groups.

**Figure 8**



Of respondents diagnosed with arthritis, 67.8% reported that they were not treated by a physician for this illness (Figure 8). Differences in responses were found between gender; more men reported not being treated for their arthritis compared to women.



Table 1

**Ever Told Have Arthritis by Physician  
Santa Clara County, 2000**

Independent Sociodemographic Variables	Unadjusted Odds Ratio	Confidence Interval
<b>Poor or Fair Health Status (Yes=1, No=0)</b>	<b>3.55</b>	<b>2.74, 4.60</b>
Chronic Drinker (Yes=1, No=2)	0.73	0.42, 1.27
Current Smoker (Yes=1, No=0)	0.8	0.58, 1.10
Risk for Second Hand Smoke (Yes=1, No=0)	0.84	0.65, 1.08
<b>Overweight or Obese (Yes=1, No=0)</b>	<b>1.79</b>	<b>1.43, 2.24</b>
No Health Plan (Yes=1, No=0)	0.32	0.18, 0.58
<b>Had to See Physician in Past Year (Yes=1, No=0)</b>	<b>3.62</b>	<b>2.85, 4.60</b>
Could Not Pay to See Physician (Yes=1, No=0)	0.83	0.50, 1.37
<b>Last Checkup Three Plus Years Ago (Yes=1, No=0)</b>	<b>0.5</b>	<b>0.37, 0.68</b>
Less Than High School Education (Yes=1, No=0)	1.21	0.85, 1.72
Below 100% Poverty Level (Yes=1, No=0)	1.09	0.75, 1.58
<b>Below 200% Poverty Level (Yes=1, No=0)</b>	<b>1.42</b>	<b>1.10, 1.82</b>
<b>Not Employed (Yes=1, No=0)</b>	<b>3.89</b>	<b>3.12, 4.86</b>
<b>Male (Yes=1, No=0)</b>	<b>0.48</b>	<b>0.38, 0.60</b>
<b>White (Yes=1, No=0)</b>	<b>1.87</b>	<b>1.50, 2.33</b>
<b>Hispanic (Yes=1, No=0)</b>	<b>0.69</b>	<b>0.52, 0.91</b>
<b>Asian/other (Yes=1, No=0)</b>	<b>0.53</b>	<b>0.39, 0.70</b>
<b>Age 40 and over (Yes=1, No=0)</b>	<b>6.32</b>	<b>4.72, 8.45</b>

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

The association of respondents' socio-demographic variables and being diagnosed with arthritis is presented as both unadjusted (Table 1) and adjusted (Table 2) odds ratios. Eleven variables found to be associated with diagnosis of arthritis included race/ethnicity, age, gender, employment status, income level, body weight, perception of one's health, and utilization of healthcare (Table 1).

After adjusting for confounding, only six variables remained significantly associated being diagnosed with arthritis (Table 2). Respondents diagnosed with arthritis were more likely to have a “poor or fair” perception of one’s health (OR: 2.55; 95% CI: 1.87 - 3.48), be overweight or obese (OR: 1.55; 95% CI: 1.20 - 2.00), had a need to see a physician in past year (OR: 3.15; 95% CI: 2.41-4.12), not be employed (OR: 2.72; 95% CI: 2.11 - 3.51), and be in the 40 or older age range (OR: 5.17; 95% CI: 3.74 - 7.15). Men were less likely to have been diagnosed with arthritis than women (OR: 0.52; 95% CI: 0.40 - 0.67).

Table 2

**Ever Told Have Arthritis by Physician  
Santa Clara County, 2000**

	Adjusted Odds Ratio	Confidence Interval
<b>Poor or Fair Health Status (Yes=1, No=0)</b>	<b>2.55</b>	<b>1.87, 3.84</b>
<b>Overweight or Obese (Yes=1, No=0)</b>	<b>1.55</b>	<b>1.20, 2.00</b>
<b>Had to See Physician in Past Year (Yes=1, No=0)</b>	<b>3.15</b>	<b>2.41, 4.12</b>
<b>Not Employed (Yes=1, No=0)</b>	<b>2.72</b>	<b>2.11, 3.51</b>
<b>Male (Yes=1, No=0)</b>	<b>0.52</b>	<b>0.40, 0.67</b>
<b>Age 40 and over (Yes=1, No=0)</b>	<b>5.17</b>	<b>3.74, 7.15</b>

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

### Summary of Key Findings for Arthritis

Arthritis is a condition that reduces physical activity, especially among older adults. The loss of physical independence can have a profound effect on a person's perception of health. Approximately 35.7% of respondents acknowledged having joint pain in the past year. More women, Whites, men 18 to 24 years old and respondents 45 years and over reported having pain and discomfort in or around a joint. All respondents in this case may not be suffering from arthritis but suffer from pain caused by overexertion during physical activities which can lead to injuries. This is more likely within the younger population and men.

In fact, 15.9% were actually diagnosed with arthritis by a physician. Mostly women, whites, and older adults admitted to being diagnosed with arthritis. Of those diagnosed with arthritis, 36.9% were not aware of the type of arthritis they had and 67.8% were not being treated for the condition.

Overall, approximately 28.2% of respondents claimed that arthritis-like symptoms limited them in their activities. The Healthy People 2010 target of reducing limited activities due to joint pains is 21%.

Factors significantly associated with a diagnosis for arthritis were having a "poor or fair" perception of one's own health, being overweight or obese, needing to see a physician in the past year, not being employed, being age 40 or older, and female gender.

## asthma

Asthma is a lung disease characterized by airway constriction, mucus secretion, and chronic inflammation, resulting in reduced airflow and wheezing, coughing, chest tightness, and difficulty breathing (DHHS, 2000). The American Lung Association (n.d.) reports that asthma attacks, which can be fatal, bring more than 1.9 million Americans to emergency rooms each year. Furthermore, asthma ranks eighth among chronic conditions, affecting up to 14.9 million individuals, both children and adults, in the nation. Between 1982 and 1996, the prevalence rate of asthma rose from 34.8 to 55.2 per 100,000 persons -- an increase of 59%.

According to the National Heart, Lung, and Blood Institute (NHLBI, 1999) and cited in the Healthy People 2010 report (DHHS, 2000), asthma is responsible for about 500,000 hospitalizations and 5,000 deaths a year. In addition, Weiss et al (1996, as cited by DHHS, 2000), documented that direct medical expenditures for asthma amounted to \$3.64 billion, and indirect economic losses accounted for an additional \$2.6 billion in 1990.

Although asthma is a serious and growing health problem in the nation, most of the complications caused by asthma could be averted if persons with asthma and their healthcare providers manage the disease according to established guidelines.

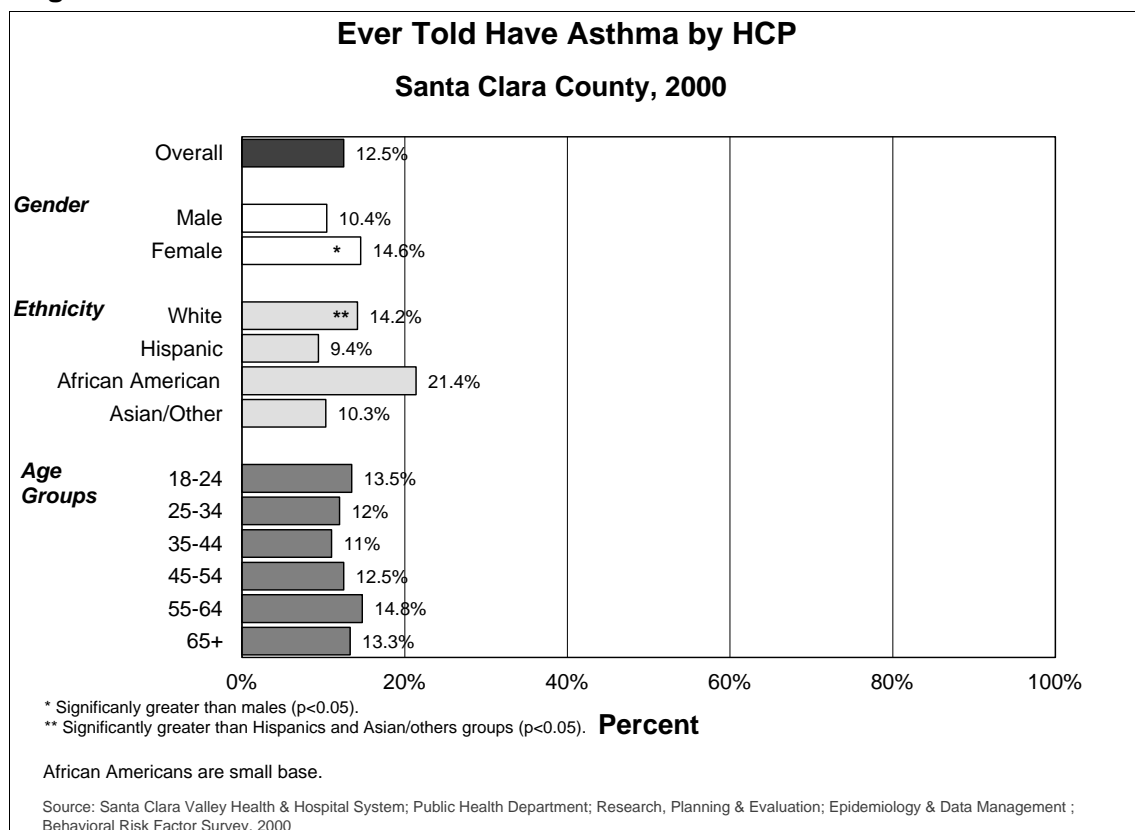
## Healthy People 2010 Goal and Objectives: Asthma

Goal: Promote respiratory health through better prevention, detection, treatment, and education efforts		
Objectives		Target
24-1	Reduce asthma deaths	
c	Adolescents and adults aged 15 to 34 years	2 per million
d	Adults aged 35 to 64 years	9 per million
e	Adults aged 65 years and older	60 per million
24-2	Reduce hospitalizations for asthma	
b	Children and adults aged 5 to 64 years (age adjusted to the year 2000 standard population)	7.7 per 10,000
c	Adults aged 65 years and older (age adjusted to the year 2000 standard population)	11 per 10,000
24-3	Reduce hospital emergency department visits for asthma	
b	Children and adults aged 5 to 64 years	50 per 10,000
c	Adults aged 65 years and older	15 per 10,000
24-4	Reduce activity limitations among persons with asthma	10%
24-5	Reduce the number of school or work days missed by persons with asthma due to asthma	Developmental
24-6	Increase the proportion of persons with asthma who receive formal patient education, including information about community and self-help resources, as an essential part of the management of their condition	30%

### Data Analysis of BRFs Responses for Asthma

Overall, 12.5% of respondents said that a physician or other health professional diagnosed them with asthma at some time during their lives, regardless of whether they still had symptoms (Figure 9). This local statistic is slightly higher than national (10.5%) and California state (11.5%) BRFs figures. More women, Whites, and African Americans reported being diagnosed with asthma compared to their respective groups. It should be noted that the total number of African American survey respondents was small and may not provide an accurate representation for the group.

**Figure 9**



Further analysis revealed that women younger than age 65 had a greater proportion of being diagnosed with asthma compared to men in the same age range. Furthermore, White men (12.3%) reported a greater proportion of being diagnosed with asthma compared to Hispanic (7.4%) and Asian/other (7.0%) men. Likewise, more White women (16.1%) had asthma compared to Hispanic women (11.7%). With respect to age and ethnic groups, Whites 18 to 24 years (21.5%) reported having asthma more compared to Hispanics (6.0%) or Asian/others (7.7 %) in the same age range. For those age 35 to 44 years, a greater proportion of Whites (13.4%) reported being diagnosed with asthma compared to Hispanics (5.1%) (figure not shown).

**Figure 10**

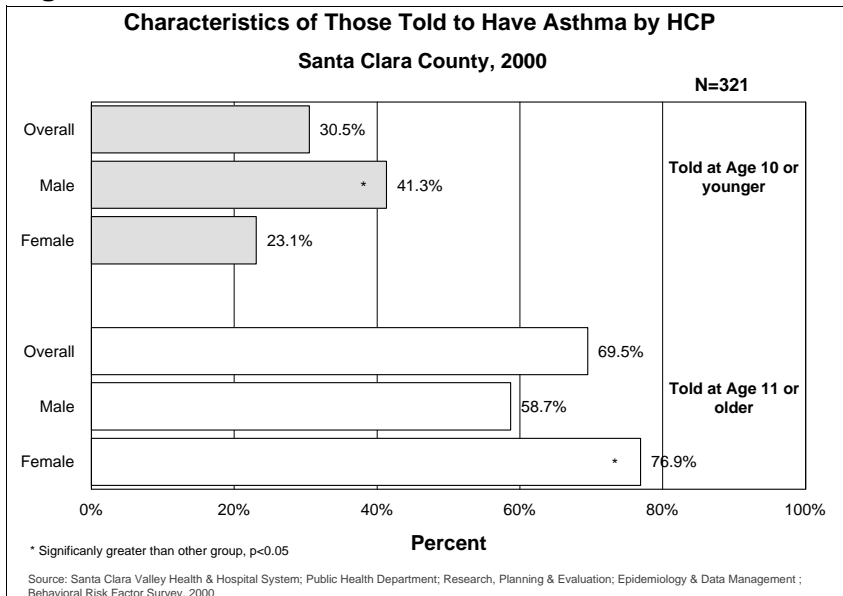
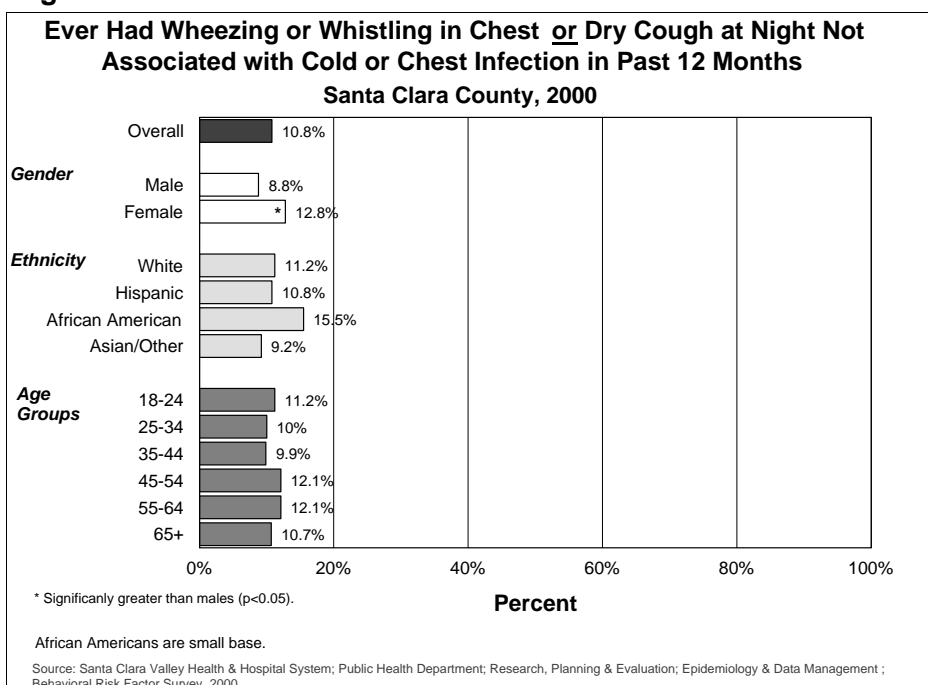


Figure 10 shows that 30.5% of respondents diagnosed with asthma learned of their condition at age 10 or younger. Significantly more males responded being diagnosed with asthma at age 10 or younger.

Overall, 10.8% of persons responded that they experienced asthma-like symptoms, much as wheezing or whistling in the chest or a dry cough that were not associated with a chest cold, in the past 12 months (Figure 11). More women reported recently having asthma-like symptoms than men. Reports of having recent asthma-like symptoms did not vary significantly across age and ethnic groups.

**Figure 11**



Among respondents who reported having asthma-like symptoms in the past 12 months, 17.7% required an urgent visit to a physician, urgent care center, or emergency room and 55.6% required medication (Figure 12). There were no significant differences between men and women.

**Figure 12**

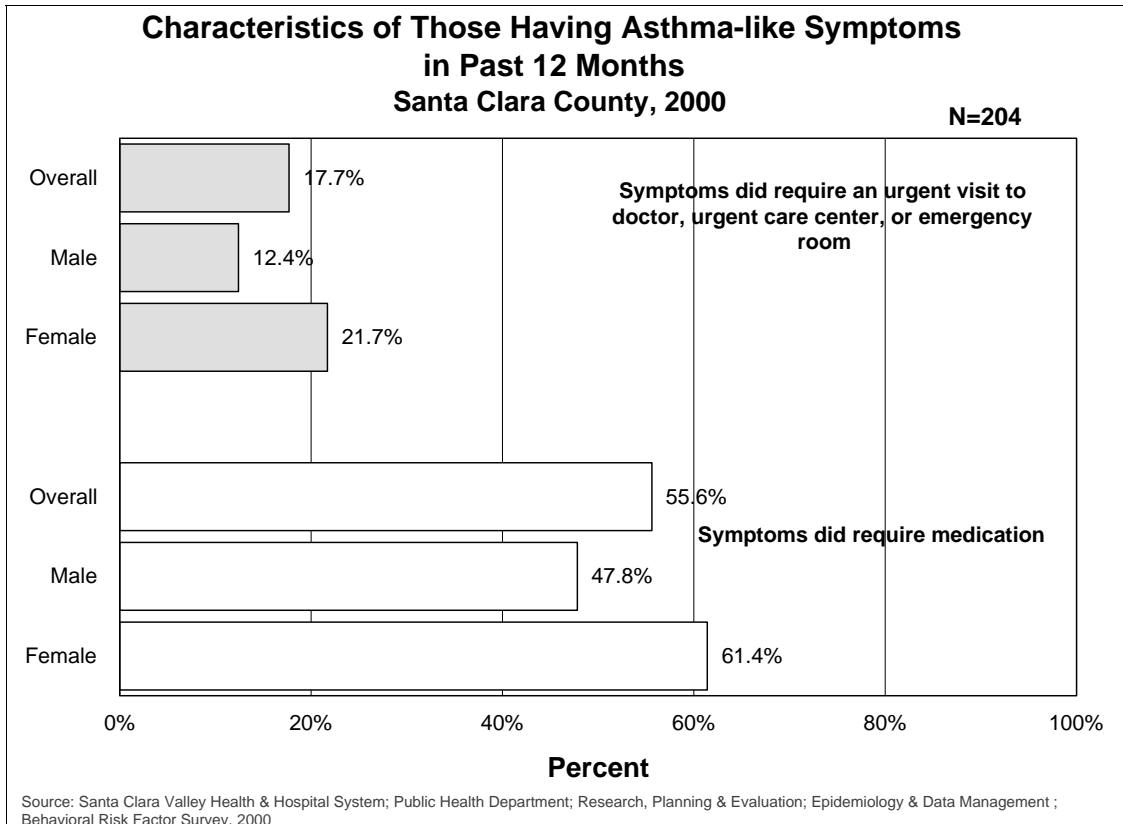




Table 3

**Having Asthma-like Symptoms in Past 12 Months**  
**Santa Clara County, 2000**

Independent Sociodemographic Variables	Unadjusted Odds Ratio	Confidence Interval
<b>Poor or Fair Health Status (Yes=1, No=0)</b>	<b>2.62</b>	<b>1.94, 3.54</b>
Chronic Drinker (Yes=1, No=2)	1.56	0.94, 2.60
<b>Current Smoker (Yes=1, No=0)</b>	<b>1.48</b>	<b>1.08, 2.05</b>
<b>Risk for Second Hand Smoke (Yes=1, No=0)</b>	<b>1.32</b>	<b>1.00, 1.74</b>
<b>Overweight or Obese (Yes=1, No=0)</b>	<b>1.38</b>	<b>1.06, 1.79</b>
No Health Plan (Yes=1, No=0)	0.89	0.55, 1.46
<b>Had to See Physician in Past Year (Yes=1, No=0)</b>	<b>2.44</b>	<b>1.87, 3.19</b>
<b>Could Not Pay to See Physician (Yes=1, No=0)</b>	<b>3.05</b>	<b>2.01, 4.62</b>
Last Checkup Three Plus Years Ago (Yes=1, No=0)	1.15	0.85, 1.54
Less Than High School Education (Yes=1, No=0)	0.86	0.54, 1.38
Below 100% Poverty Level (Yes=1, No=0)	1.11	0.73, 1.68
<b>Below 200% Poverty Level (Yes=1, No=0)</b>	<b>1.4</b>	<b>1.05, 1.87</b>
<b>Not Employed (Yes=1, No=0)</b>	<b>1.36</b>	<b>1.05, 1.76</b>
<b>Male (Yes=1, No=0)</b>	<b>0.66</b>	<b>0.51, 0.85</b>
White (Yes=1, No=0)	1.1	0.85, 1.41
Hispanic (Yes=1, No=0)	1	0.73, 1.36
Asian/other (Yes=1, No=0)	0.79	0.58, 1.09
Age 40 and over (Yes=1, No=0)	1.09	0.85, 1.41

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

The socio-demographic variables associated with respondents having asthma-like symptoms in the past 12 months are presented as unadjusted (Table 3) and adjusted (Table 4) odds ratios. Nine variables that were found to be associated with having asthma-like variables included gender, employment status, income level, body weight, smoking status, perception of one's health, and utilization of healthcare (Table 3).

The logistic regression analysis shows that after adjusting for confounding variables, only five were found to significantly influence the odds of having asthma-like symptoms (Table 4). Therefore, the adjusted odds ratios suggest that respondents with asthma-like symptoms were less likely to be male (OR: 0.67; 95% CI: 0.51 - 0.88). They were more likely to have a “poor or fair” perception of health (OR: 1.98; 95% CI: 1.42 - 2.76), be overweight or obese (OR: 1.32; 95% CI: 1.00 - 1.73), needed to see a physician in the past year (OR: 2.19; 95% CI: 1.65 - 2.91), and could not pay to see physician (OR: 2.35; 95% CI 1.50 - 3.70).

Table 4

**Having Asthma-like Symptoms in Past 12 Months  
Santa Clara County, 2000**

	Adjusted Odds Ratio	Confidence Interval
<b>Poor or Fair Health Status (Yes=1, No=0)</b>	<b>1.98</b>	<b>1.42, 2.76</b>
<b>Overweight or Obese (Yes=1, No=0)</b>	<b>1.32</b>	<b>1.00, 1.73</b>
<b>Had to See Physician in Past Year (Yes=1, No=0)</b>	<b>2.19</b>	<b>1.65, 2.91</b>
<b>Could Not Pay to See Physician (Yes=1, No=0)</b>	<b>2.35</b>	<b>1.50, 3.70</b>
<b>Male (Yes=1, No=0)</b>	<b>0.67</b>	<b>0.51, 0.88</b>

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

### Summary of Key Findings for Asthma

BRFS survey results found that 10.8% of respondents experienced asthma-like symptoms in the past 12 months. However, only 12.5% had ever been diagnosed with asthma, of which 30.5% were diagnosed by the age of 10 years old. Although more women and whites 18 to 24 and 35 to 44 years old reported having been diagnosed with asthma, only higher proportions of women reported having recent asthma-like symptoms. Of those with asthma-like symptoms, 17.7% sought urgent medical attention for the symptoms, and over half (55.6%) needed medication to treat disease.

Variables associated with having asthma-like symptoms included female gender, having a “poor or fair” perception of health, being overweight or obese, needing to see a physician in the past year, and not being able to pay to see physician.

Differences among race/ethnic groups were not apparent in this survey, though they do exist. The true prevalence of asthma among the entire population is still not well understood. Survey results imply that asthma-like symptoms affect 1 out of 10 Santa Clara County adults. Though it is a problem in adults, asthma affects children’s lives as well. The entire picture for asthma is still incomplete.

## blood pressure

High blood pressure, or hypertension, is characterized by a consistent blood pressure reading of 140/90 mm Hg or higher, and is a major risk factor for heart disease, kidney disease, stroke, and heart failure (DHHS, 2000). Researchers at the National Heart, Lung, and Blood Institute (NHLBI, n.d.) claim that hypertension is especially dangerous because it often has no warning signs or symptoms.

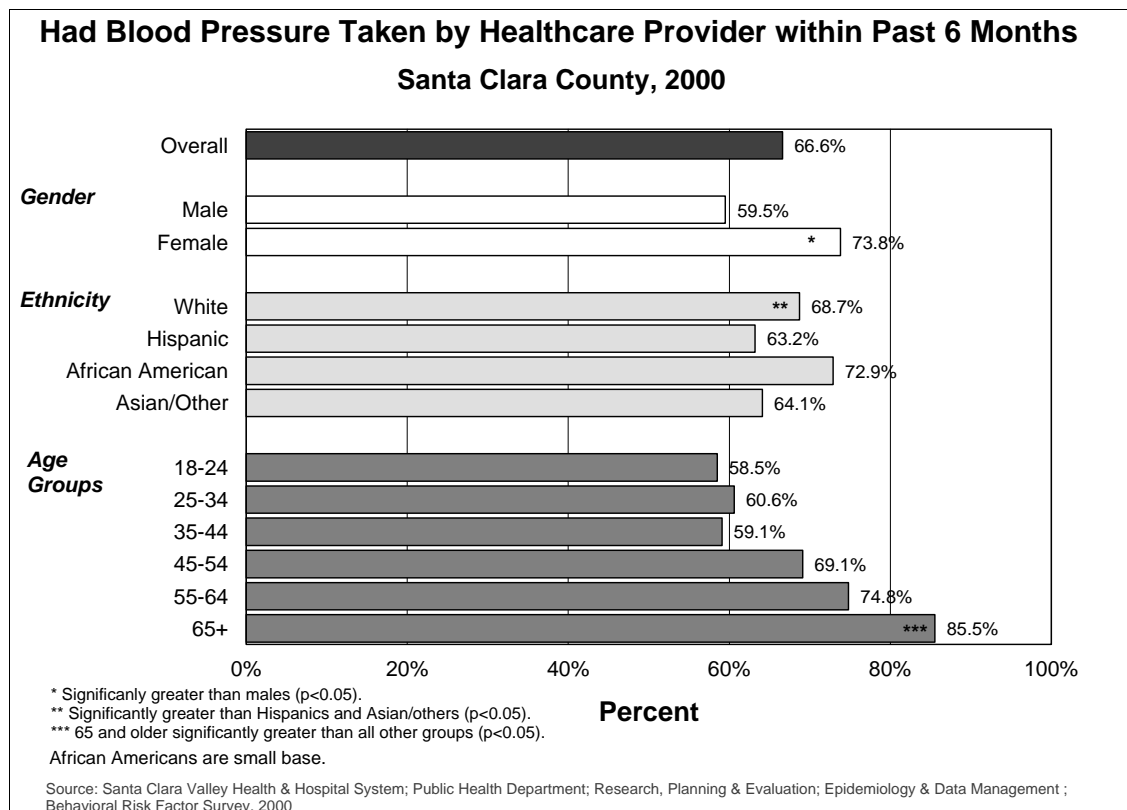
According to the Healthy People 2010 report (DHHS, 2000), an estimated one in every four American adults has high blood pressure and a large proportion of persons are still unaware that they have this disorder. Once high blood pressure develops, it usually lasts a lifetime. However, high blood pressure can generally be prevented and controlled through healthy practices, such as blood pressure screening, losing weight, increasing physical activity, and reducing sodium intake.

### Healthy People 2010 Goal and Objectives: Blood Pressure

<b>Goal: Improve cardiovascular health and quality of life through the prevention, detection, and treatment of risk factors; early identification and treatment of heart attacks and strokes; and prevention of recurrent cardiovascular events</b>		
<b>Objectives</b>		<b>Target</b>
12-9	Reduce the proportion of adults with high blood pressure	16%
12-10	Increase the proportion of adults with high blood pressure whose blood pressure is under control	50%
12-11	Increase the proportion of adults with high blood pressure who are taking action (for example, losing weight, increasing physical activity, or reducing sodium intake) to help control their blood pressure	95%
12-12	Increase the proportion of adults who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high	95%

Data Analysis of BRFs Responses for Blood Pressure

Figure 13



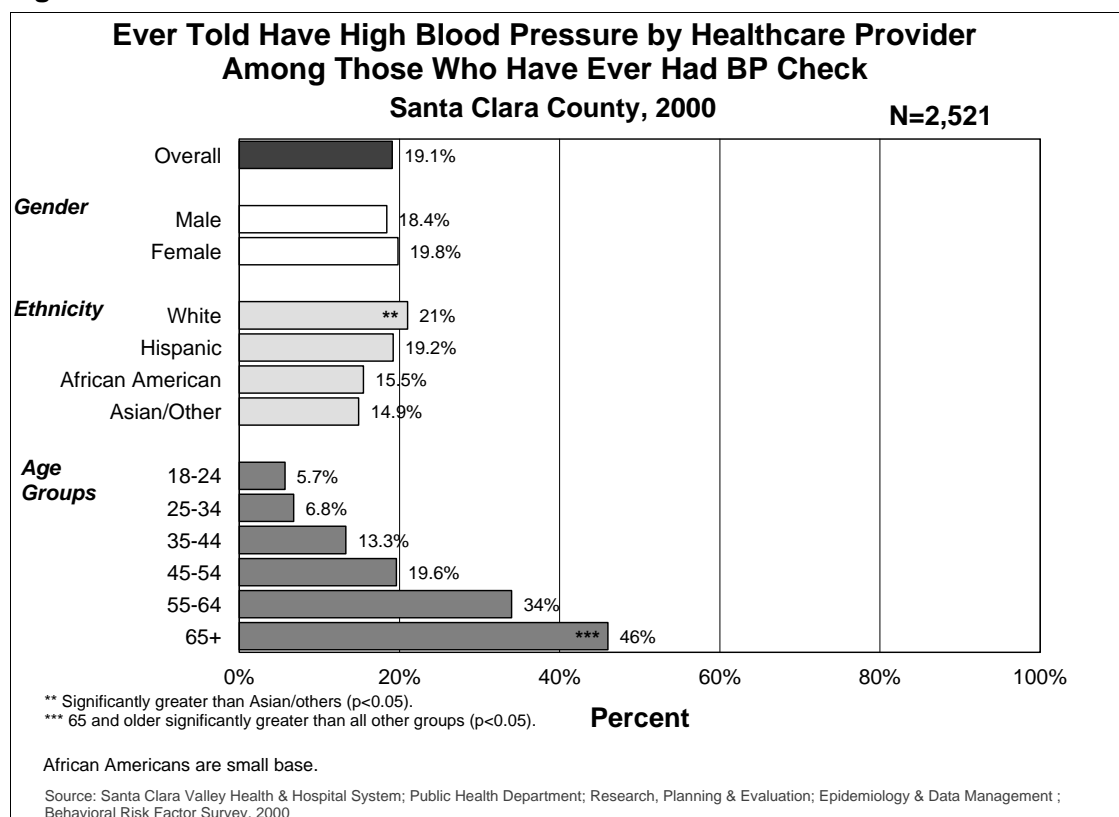
Overall, 66.6% of respondents had a blood pressure check within the past six months by a healthcare provider (Figure 13). A greater proportion of women, Whites, and older adults reported recently having their blood pressure checked compared to their respective counterparts.

Further analysis revealed more White men (61.9%) recently had their blood pressure checked compared to Hispanic men (54.5%). More women younger than age 55 reported a having their blood pressure checked at least 6 months prior compared to did men of the same age range. However, after age 55, proportions were similar for both genders (figure not shown).

Figure 14 shows that 19.1% of respondents had been diagnosed with high blood pressure, which is slightly above the Healthy People 2010 target of 16%. More Whites were diagnosed with hypertension compared to Asian/others. Diagnosis for hypertension also increased as respondents' age increased.

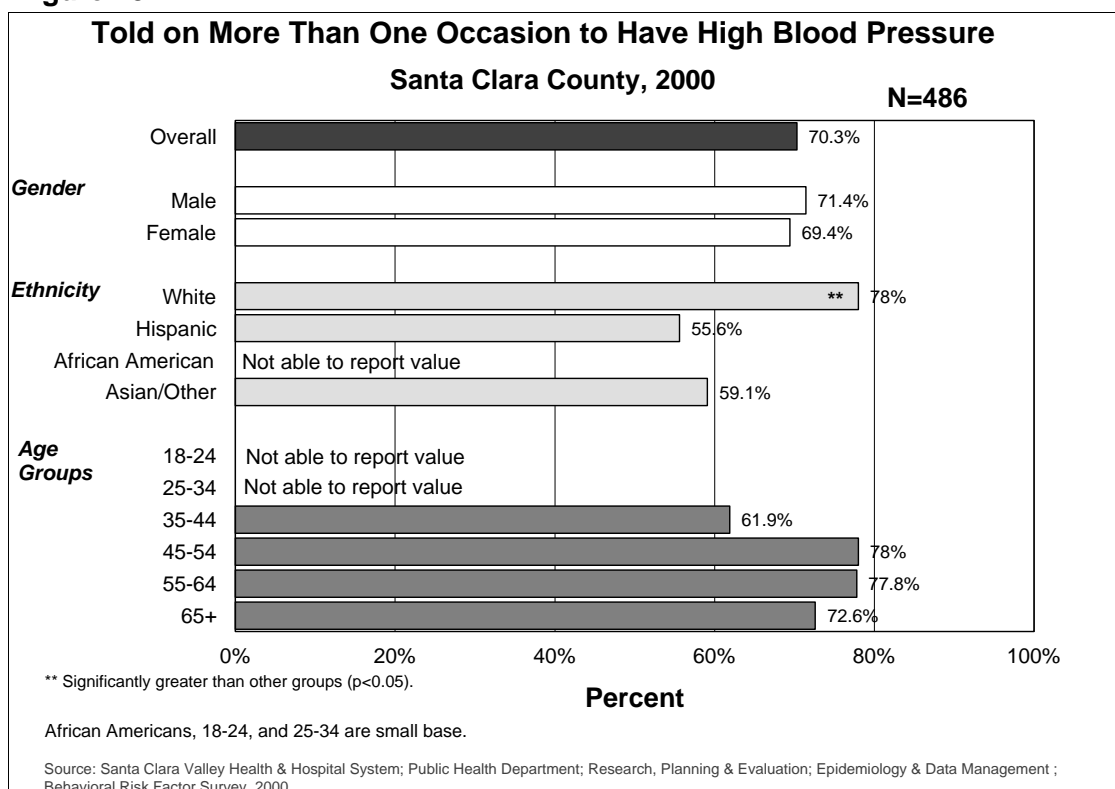
Further analysis revealed that a greater proportion of White men (22.0%) reported having high blood pressure compared to Asian/other men (12.9%), and more Hispanics age 35 to 44 years (19.7%) reported being diagnosed with hypertension compared to Asian/others in the same age group (7.7%) (figure not shown).

**Figure 14**



Among respondents diagnosed with high blood pressure, 70.3% of respondents had been told more than once that their blood pressure was high (Figure 15). There were no significant differences in gender or among age groups.

**Figure 15**



Further analysis revealed White males, White females, and Whites age 65 and over reported that they were informed multiple times about their blood pressure being too high compared to other groups. Additionally, significantly more Asian/others age 35 to 44 years were told on more than one occasion to have high blood pressure compared to Hispanics in the same age range (data not shown).

Table 5

**Ever Told Have High Blood Pressure by HCP  
Santa Clara County, 2000**

Independent Sociodemographic Variables	Unadjusted Odds Ratio	Confidence Interval
<b>Poor or Fair Health Status (Yes=1, No=0)</b>	<b>3.48</b>	<b>6.74, 11.35</b>
Chronic Drinker (Yes=1, No=2)	1.33	0.86, 2.05
Current Smoker (Yes=1, No=0)	0.84	0.62, 1.12
Risk for Second Hand Smoke (Yes=1, No=0)	0.94	0.74, 1.18
<b>Overweight or Obese (Yes=1, No=0)</b>	<b>2.83</b>	<b>2.27, 3.52</b>
No Health Plan (Yes=1, No=0)	1.04	0.71, 1.5
<b>Had to See Physician in Past Year (Yes=1, No=0)</b>	<b>1.75</b>	<b>1.43, 2.15</b>
<b>Could Not Pay to See Physician (Yes=1, No=0)</b>	<b>2.02</b>	<b>1.37, 2.98</b>
<b>Last Checkup Three Plus Years Ago (Yes=1, No=0)</b>	<b>0.52</b>	<b>0.39, 0.68</b>
<b>Less Than High School Education (Yes=1, No=0)</b>	<b>1.64</b>	<b>1.20, 2.25</b>
Below 100% Poverty Level (Yes=1, No=0)	1.26	0.90, 1.76
<b>Below 200% Poverty Level (Yes=1, No=0)</b>	<b>1.36</b>	<b>1.08, 1.73</b>
<b>Not Employed (Yes=1, No=0)</b>	<b>2.21</b>	<b>1.80, 2.71</b>
Male (Yes=1, No=0)	0.92	0.75, 1.12
<b>White (Yes=1, No=0)</b>	<b>1.31</b>	<b>1.07, 1.60</b>
Hispanic (Yes=1, No=0)	1.02	0.795, 1.30
<b>Asian/other (Yes=1, No=0)</b>	<b>0.69</b>	<b>0.54, 0.886</b>
<b>Age 40 and over (Yes=1, No=0)</b>	<b>4.35</b>	<b>3.42, 5.54</b>

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

The association of respondents' socio-demographic variables and being diagnosed with high blood pressure is presented as both unadjusted (Table 5) and adjusted (Table 6) odd ratios in Tables 5 and 6. Twelve variables were found to be independently associated with having high blood pressure. These included gender, age, race, employment status, income level, years of education, body weight, perception of one's health, and utilization of healthcare (Table 5).



After adjusting for confounding, only five variables remained significant and appeared to influence having high blood pressure (Table 6). Respondents diagnosed with high blood pressure were more likely to have a “poor or fair” perception of health (OR: 2.78; 95% CI: 2.08 - 3.72), be overweight or obese (OR: 2.50; 95% CI: 1.97 - 3.16), had to see a physician in the past year (OR: 1.89; 95% CI: 1.18 - 3.03), not be employed (OR: 1.45; 95% CI: 1.16 - 1.83), and be age 40 or older (OR: 4.07; 95% CI: 3.09 - 5.40). Moreover, those with high blood pressure were less likely to have had a regular medical checkup more than 3 years ago (OR: 0.61; 95% CI: 0.45 - 0.84).

Table 6

**Ever Told Have High Blood Pressure by HCP  
Santa Clara County, 2000**

	Adjusted Odds Ratio	Confidence Interval
<b>Poor or Fair Health Status (Yes=1, No=0)</b>	<b>2.78</b>	<b>2.08, 3.72</b>
<b>Overweight or Obese (Yes=1, No=0)</b>	<b>2.5</b>	<b>1.97, 3.16</b>
<b>Could Not Pay to See Physician (Yes=1, No=0)</b>	<b>1.89</b>	<b>1.18, 3.03</b>
<b>Last Checkup Three Plus Years Ago (Yes=1, No=0)</b>	<b>0.61</b>	<b>0.45, 0.84</b>
<b>Not Employed (Yes=1, No=0)</b>	<b>1.45</b>	<b>1.16, 1.83</b>
<b>Age 40 and over (Yes=1, No=0)</b>	<b>4.07</b>	<b>3.09, 5.37</b>

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

### Summary of Key Findings for Blood Pressure

Approximately 67% of respondents reported that they had their blood pressure checked within the past 6 months; 19.1% were diagnosed with high blood pressure. More Whites, women, and older adults reported getting their blood pressure checked, and more Whites and respondents 35 years and older had been diagnosed with hypertension. Furthermore, 70.3% of respondents with hypertension were told more than once that their blood pressure was too high. This was especially true among Whites 65 years and older of both genders.

Variables associated with having high blood pressure include having a “poor or fair” perception of health, being overweight or obese, having to see a physician in the past year, not being employed, being age 40 years or older, and not having a regular medical checkup in the past 3 years.

Compared to BRFS 1997 results, less respondents in this survey had their blood pressure checked in the past six months. However, more survey participants in 2000 did have their blood pressure checked between 6 months to 2 years compared to those in the BRFS 1997. A comparison of 1997 and 2000 BRFS results are available in Appendix A.

Given the results of this survey, more education should be focused on increasing blood pressure screening and maintaining a health body weight to reduce high blood pressure levels, especially among the Whites.

## diabetes

Diabetes is a chronic disease caused by insulin deficiency (Type 1) and/or resistance to insulin action (Type 2), and is associated with hyperglycemia (elevated blood glucose levels) (DHHS, 2000). The etiology of diabetes is unknown, although genetics and environmental factors, such as obesity and lack of physical activity, may influence its onset.

According to the American Diabetes Association's website (n.d.), an estimated 17 million people or 6.2% of the population in the United States have diabetes. However, only an 11.1 million have been diagnosed. Therefore, an estimated 5.9 million people are still not aware that they may have the disease. The number of individuals with diabetes has increased steadily over the years, particularly for Type 2 diabetes. Each day approximately 2,200 people are diagnosed with diabetes, which extrapolates to almost 1 million people diagnosed each year. The American Diabetes Association and Flegal et al (1991, as cited by DHHS, 2000) add that the increase in the number of diabetes cases has occurred particularly within certain racial and ethnic groups, such as African Americans, Asian & Pacific Islanders, Hispanics, and Native Americans.

The Healthy People 2010 report (DHHS, 2000) states that over the past decade, diabetes has remained the seventh leading cause of death in the United States, primarily from diabetes-associated cardiovascular disease. Nationally, diabetes is the leading cause of nontraumatic amputations, blindness among working-age adults, and end-stage renal disease (ESRD). Other complications are heart disease, stroke, high blood pressure, and impotence. It is concluded by the CDC Diabetes Surveillance report (1997, cited by the DHHS, 2000) that these and other costly health problems associated with diabetes contribute to an impaired quality of life and substantial disability among people with diabetes.

Although diabetes poses a significant public health problem, prevention and control measures are achievable through healthy lifestyle practices, especially for Type 2 diabetes. These practices include blood sugar screening, regular doctor visits, maintaining a healthy weight, proper nutrition, regular exercise, and smoking cessation.

Healthy People 2010 Goal and Objectives: Diabetes

Goal: Through prevention programs, reduce the disease and economic burden of diabetes, and improve the quality of life for all persons who have or are at risk for diabetes		
Objectives		Target
5-1	Increase the proportion of persons with diabetes who receive formal diabetes education	60%
5-3	Reduce the overall rate of diabetes that is clinically diagnosed	25 overall cases per 1,000 population
5-4	Increase the proportion of adults with diabetes whose condition has been diagnosed	80%
5-5	Reduce the diabetes death rate	45 deaths per 100,000 population
5-6	Reduce diabetes-related deaths among persons with diabetes	7.8 deaths per 1,000 persons with diabetes
5-7	Reduce deaths from cardiovascular disease in persons with diabetes	309 deaths per 100,000 persons with diabetes
5-9	Reduce the frequency of foot ulcers in persons with diabetes	Developmental
5-10	Reduce the rate of lower extremity amputations in persons with diabetes	1.8 lower extremity amputations per 1,000 persons with diabetes per year
5-11	Increase the proportion of persons with diabetes who obtain an annual urinary microalbumin measurement	Developmental
5-12	Increase the proportion of adults with diabetes who have a glycosylated hemoglobin measurement at least once a year	50%
5-13	Increase the proportion of adults with diabetes who have an annual dilated eye examination	75%
5-14	Increase the proportion of adults with diabetes who have at least an annual foot examination	75%
5-17	Increase the proportion of adults with diabetes who perform self-blood-glucose-monitoring at least once daily	60%

### Data Analysis of BRFs Responses for Diabetes

According to the BRFs 2000 interview, 5.1% of respondents said that a physician had diagnosed them with diabetes (Figure 16). This proportion is slightly lower than figures gathered by BRFs studies in the nation (6.1%) and California (6.8%). There were no differences reported across genders and ethnic groups. On the other hand, persons 55 years and older had a significantly higher proportion of being diagnosed with diabetes than those younger than 55 years old.

A greater proportion of Hispanics 55 to 64 years (22.2%) and 65 years and over (22.1%) had diabetes compared to Whites in the same age groups (10.3% and 10.5%, respectively).

**Figure 16**

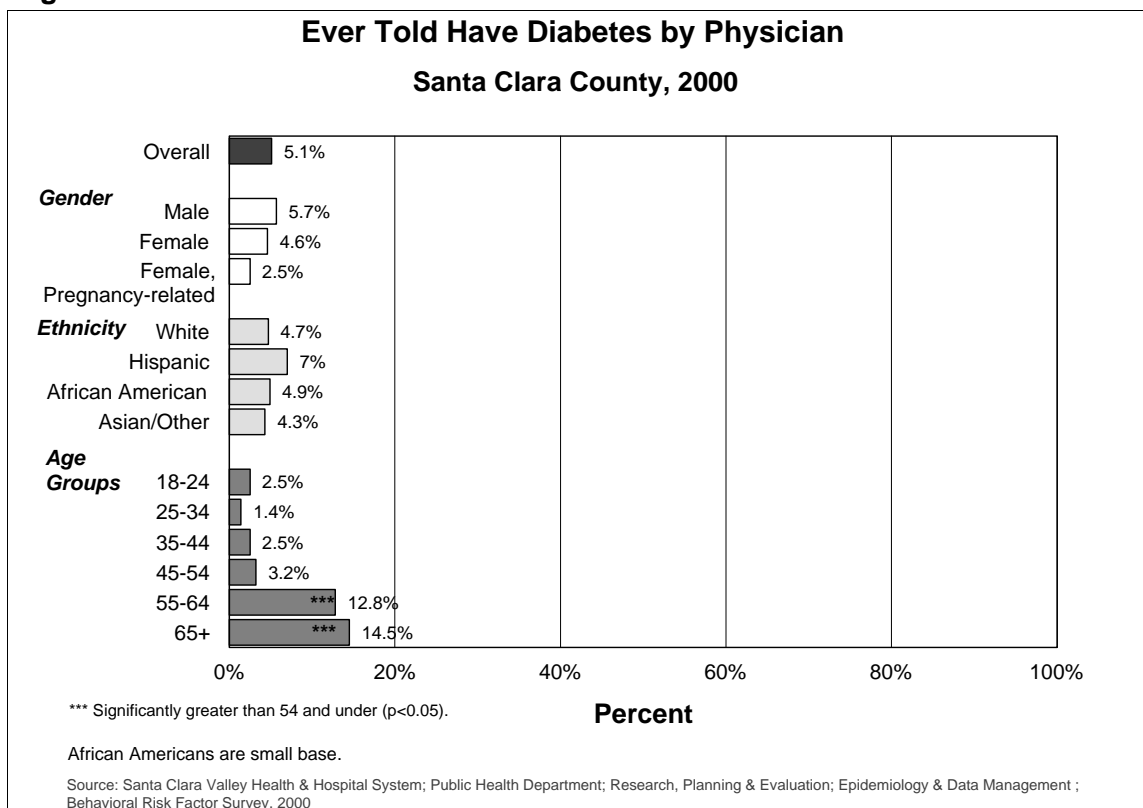


Figure 17 illustrates personal care practices of persons diagnosed with diabetes. Overall, 18.7% of diabetic respondents reported taking insulin, which is slightly lower than the proportion reported in California (20.3%). Approximately 51.5% of diabetic respondents also claimed they checked their blood for glucose or sugar on a daily basis, which is less than 10 percentage points under the Health People 2010 target of 60%. Another 18.8% of diabetic respondents said they checked their glucose levels weekly. Additionally, 74.5% acknowledged that they had their pupils dilated on a recent eye exam to test for damage to the retina that can result from diabetes, thus achieving the Healthy People 2010 goal of 75%. The average number of times diabetic respondents saw a physician in the past year for their diabetes was 5 visits.

**Figure 17**

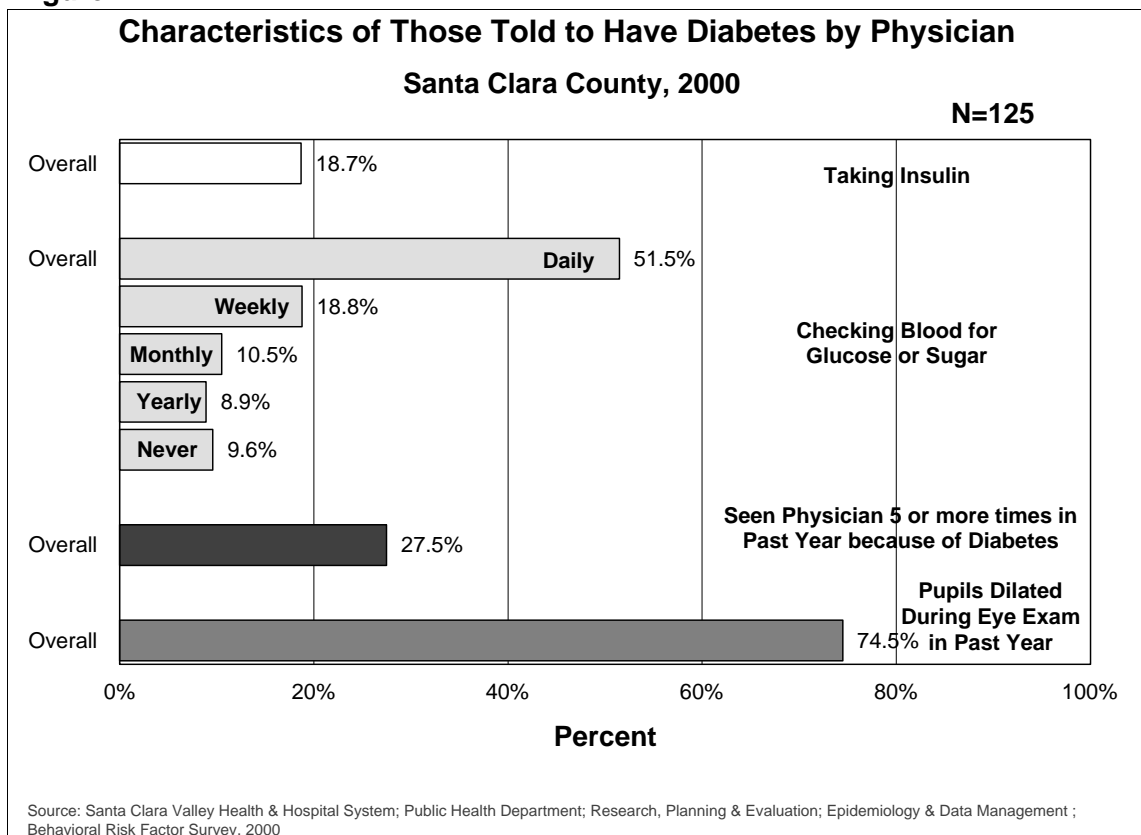
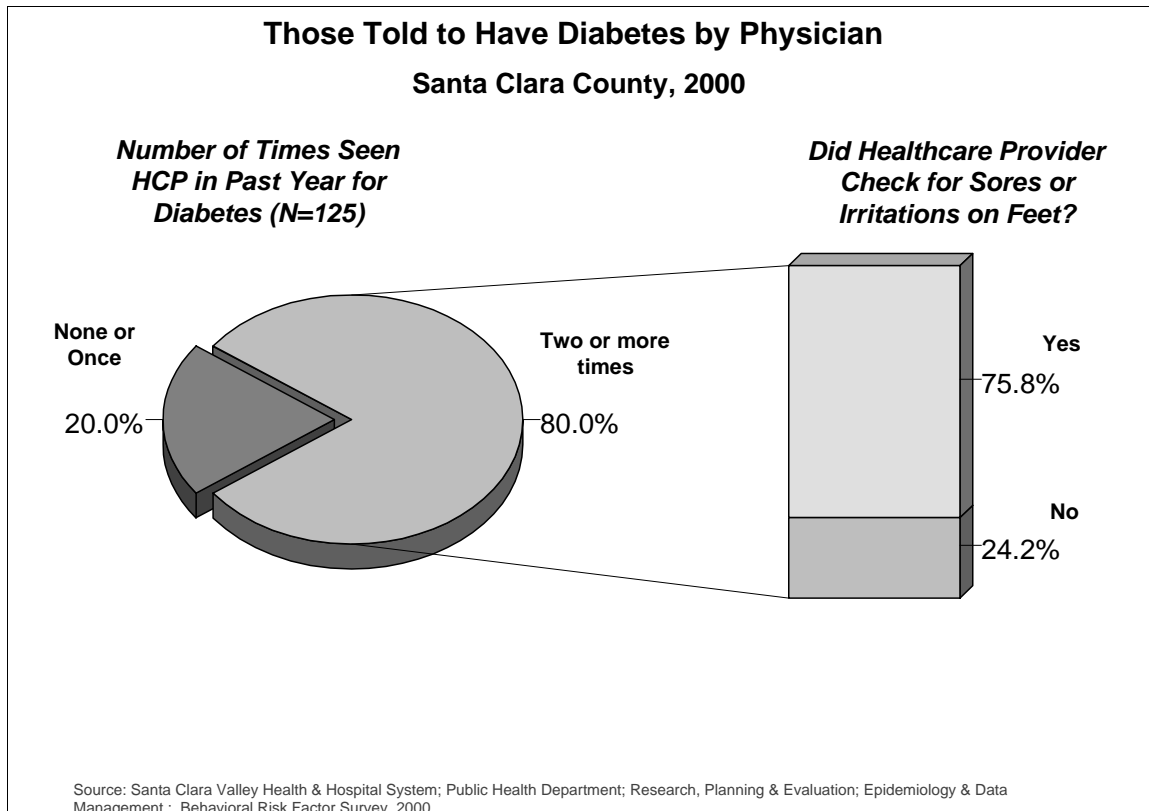


Figure 18



Approximately, 27.5% of respondents reported five or more medical visits for diabetes care. The majority (80.0%) of diabetic respondents had at least two or more visits to the physician for diabetes care (Figure 18). Among this group, 75.8% acknowledged that a health professional had checked their feet for sores or irritation, which achieves the Healthy People 2010 target of 75.0%. Routine examinations of sores on the feet of diabetics is especially important since the disease can reduce blood flow to extremities, which can lead to severe infections and need for amputations.

The socio-demographic variables associated with a diagnosis of diabetes include gender, age, race/ethnicity, employment status, income level, years of education, body weight, perception of one's health, utilization of healthcare, having high blood pressure, and being diabetic (Table 7).

**Table 7**

**Told to Have Diabetes by Physician  
Santa Clara County, 2000**

Independent Sociodemographic Variables	Unadjusted Odds Ratio	Confidence Interval
<b>Poor or Fair Health Status (Yes=1, No=0)</b>	<b>7.58</b>	<b>5.24, 10.96</b>
Chronic Drinker (Yes=1, No=2)	1.3	0.62, 2.73
Current Smoker (Yes=1, No=0)	1.35	0.86, 2.13
Risk for Second Hand Smoke (Yes=1, No=0)	1.42	0.97, 2.07
<b>Overweight or Obese (Yes=1, No=0)</b>	<b>3.09</b>	<b>2.05, 4.65</b>
No Health Plan (Yes=1, No=0)	0.86	0.43, 1.73
<b>Had to See Physician in Past Year (Yes=1, No=0)</b>	<b>3.07</b>	<b>2.06, 4.58</b>
<b>Could Not Pay to See Physician (Yes=1, No=0)</b>	<b>2.97</b>	<b>1.73, 5.11</b>
Last Checkup Three Plus Years Ago (Yes=1, No=0)	0.22	0.11, 0.45
<b>Less Than High School Education (Yes=1, No=0)</b>	<b>1.85</b>	<b>1.11, 3.08</b>
Below 100% Poverty Level (Yes=1, No=0)	1.16	0.65, 2.07
<b>Below 200% Poverty Level (Yes=1, No=0)</b>	<b>2.06</b>	<b>1.41, 3.01</b>
<b>Not Employed (Yes=1, No=0)</b>	<b>3.04</b>	<b>2.12, 4.35</b>
<b>Male (Yes=1, No=0)</b>	<b>1.24</b>	<b>0.87, 1.76</b>
White (Yes=1, No=0)	0.82	0.58, 1.17
<b>Hispanic (Yes=1, No=0)</b>	<b>1.57</b>	<b>1.06, 2.32</b>
Asian/other (Yes=1, No=0)	0.81	0.52, 1.25
<b>Age 40 and over (Yes=1, No=0)</b>	<b>4.18</b>	<b>2.65, 6.60</b>
<b>Told Have High Blood Pressure (Yes=1, No=0)</b>	<b>5.73</b>	<b>4.00, 8.21</b>

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000



Table 8

**Told to Have Diabetes by Physician  
Santa Clara County, 2000**

	Adjusted Odds Ratio	Confidence Interval
<b>Poor or Fair Health Status (Yes=1, No=0)</b>	<b>4.2</b>	<b>2.73, 6.47</b>
<b>Overweight or Obese (Yes=1, No=0)</b>	<b>2.41</b>	<b>1.53, 3.79</b>
<b>Had to See Physician in Past Year (Yes=1, No=0)</b>	<b>1.68</b>	<b>1.08, 2.62</b>
<b>Not Employed (Yes=1, No=0)</b>	<b>1.94</b>	<b>1.28, 2.96</b>
<b>Male (Yes=1, No=0)</b>	<b>1.86</b>	<b>1.23, 2.80</b>
<b>Age 40 and over (Yes=1, No=0)</b>	<b>2.59</b>	<b>1.55, 4.30</b>
<b>Told Have High Blood Pressure (Yes=1, No=0)</b>	<b>2.56</b>	<b>1.69, 3.87</b>

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

After adjusting for confounding, only seven remained significantly associated with having diabetes (Table 8). These variables included having a “poor or fair” perception of health (OR: 4.2; 95% CI: 2.73 - 6.47), being overweight or obese (OR: 2.41; 95% CI: 1.53 - 3.79), needing to see physician in past year (OR: 1.68; 95% CI: 1.08 - 2.62), not being employed (OR: 1.94; 95% CI: 1.28 - 2.96), being age 40 and older (OR: 2.59; 95% CI: 1.55 - 4.30), and being male (OR: 1.86; 95% CI: 1.23, 2.80). Lastly, diabetic respondents were more likely to have high blood pressure than non-diabetics (OR: 2.56; 95% CI: 1.69 - 3.87).

### Summary of Key Findings for Diabetes

Overall, 5.1% of survey respondents had been diagnosed with diabetes. Although it is documented that diabetes is found in higher rates among African Americans, Asian/Pacific Islanders, Hispanics, and Native Americans, survey results found that only Hispanics 55 years and older were significantly different from Whites of the same age group. No other significant differences were reported.

Once diagnosed with diabetes, it is important to monitor glucose levels and screen for other symptoms (i.e., eye conditions and sores on feet) to prevent further infections associated with the disease that can potentially lead to blindness and amputations of the extremities. Of respondents diagnosed with diabetes, 18.7% took insulin, 18.8% checked their blood glucose levels weekly, and 74.5% had their eye pupils examined during a recent eye exam. Moreover, 51.1% of diabetic respondents checked their glucose levels daily, which is just under the Healthy People 2010 target of 60%.

The average number of visits to a healthcare provider for diabetes care was 5 visits, and 80% of respondents with diabetes visited their physician at least 2 or more times. Of those with at least two visits, 75.8% had their feet examined for sores, achieving the Healthy People 2010 target of 75%.

Factors associated with being diagnosed with diabetes include having a “poor or fair” perception of health, being overweight or obese, needing to see physician in past year, not being employed, being age 40 and older, having high blood pressure, and male gender.

Untreated or improperly managed diabetes can lead to fatal outcomes such as strokes, kidney failure, or heart attacks. Proper diagnosis is also important. Outreach and interventions that focus on educating healthy practices for people with diabetes and prevention education for others can decrease complications caused by diabetes and reduce the number of new cases each year.

## prostate cancer screening

According to the Healthy People 2010 report (DHHS, 2000), prostate cancer is the most commonly diagnosed form of cancer (other than skin cancer) among men and the second leading cause of cancer death for men in the nation. It is mostly common in men age 65 years and older. Approximately 190,000 new cases are diagnosed and more than 30,000 men die from prostate cancer each year. The National Prostate Cancer Coalition (n.d.) also adds that prostate cancer incidence rates increased 192% between 1973 and 1992. This is due to better diagnostic tests for diagnosing prostate cancer, such as the Prostate Specific Antigen (PSA) test. The risk of developing the disease increases when other close relatives also have the condition. Findings reported by the NPCC also claim that African American men have the highest rate of prostate cancer in the world, and have a 60% higher incidence rate compared to White men in the United States.

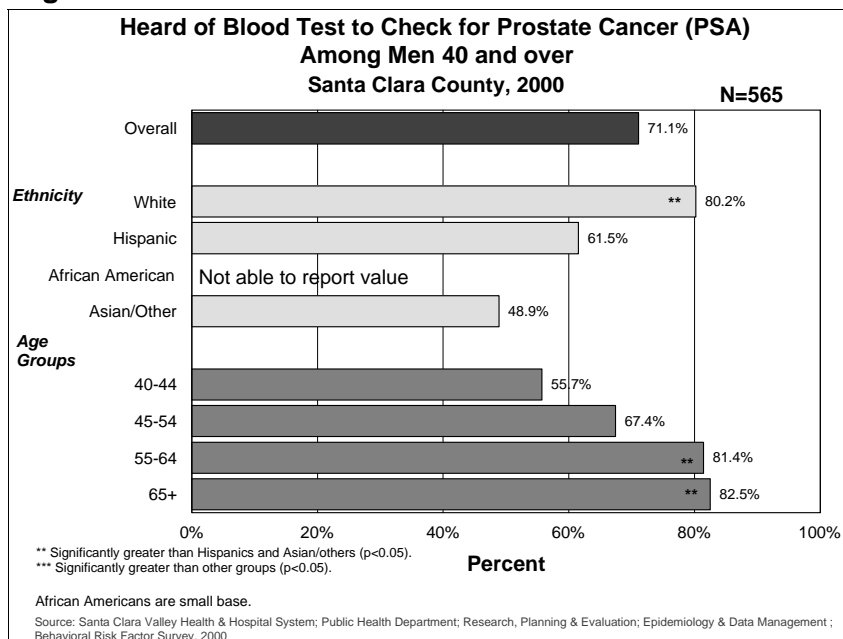
Ways to prevent prostate cancer are still not clearly known. Many physicians recommend screening but the overall benefits are still not understood. Though prostate cancer can be detected early, screening has not been shown to definitively save lives. Furthermore, research has not demonstrated that treatment (i.e. radiation and surgery) reduces disability or death caused by prostate cancer (CDC, 2001).

### Healthy People 2010 Objectives: Prostate Cancer Screening

Objective		Target
3-7	Reduce the prostate cancer death rate	28.8 deaths per 100,000 men

Data Analysis of BRFs Responses for Prostate Cancer

Figure 19



Due to the late onset of prostate cancer among men, only male respondents 40 years and older were questioned about prostate cancer screening. Overall, 71.1% of male respondents over age 40 have heard about the blood test. As age increased, the proportion of knowing about PSA also increased (Figure 19).

Table 9

**Heard of Blood Test to Check for Prostate Cancer (PSA) in Age Groups  
by Race/Ethnicity Among Men 40 and Over  
Santa Clara County, 2000**

**N=565**

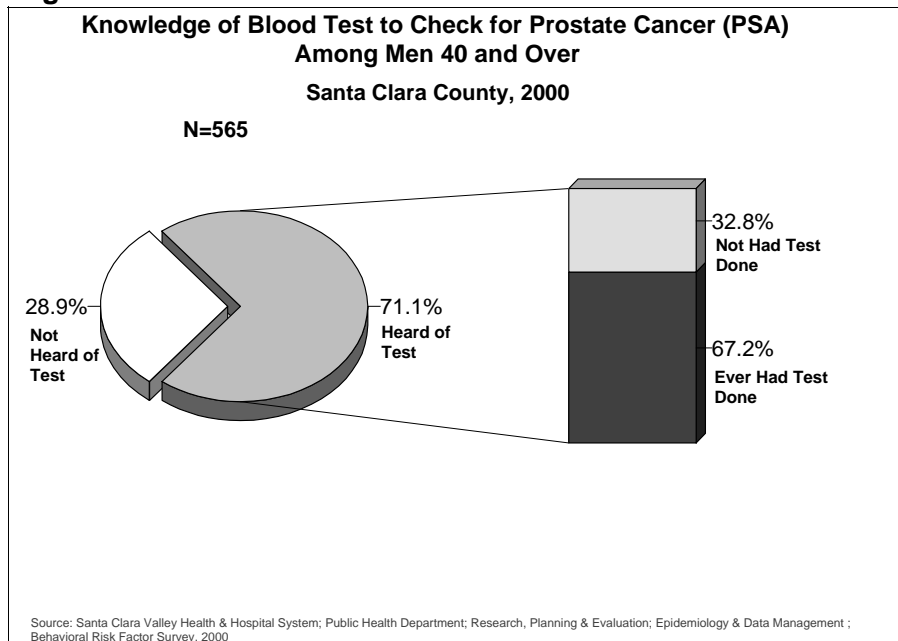
Further analysis revealed a greater proportion of White males in all age groups acknowledged knowing about this test than other ethnic groups (Table 9).

	White (%)	Hispanic (%)	Asian/Oth (%)
All	80.2 **	61.5	48.9
40-44	62.2 #	54.2	35.3
45-54	77 **	54.8	48.9
55-64	89.5 #	77.3	52.2
65+	90.4 **	66.7	65.4

\*\* Significantly greater than other racial/ethnic groups (p<0.05).  
# Significantly greater than Asian/others (p<0.05).

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

**Figure 20**



Of the male respondents who have heard of the PSA test, 67.2% reported that they have had the PSA test done (Figure 20).

**Figure 21**

Overall, 66.1% of Asian/others and 67.7% of Whites have had the PSA test (Figure 21). The proportion of males having the PSA test also increased as age increased, which is not surprising, since the risk for prostate cancer is highest among older males, especially after age 65.

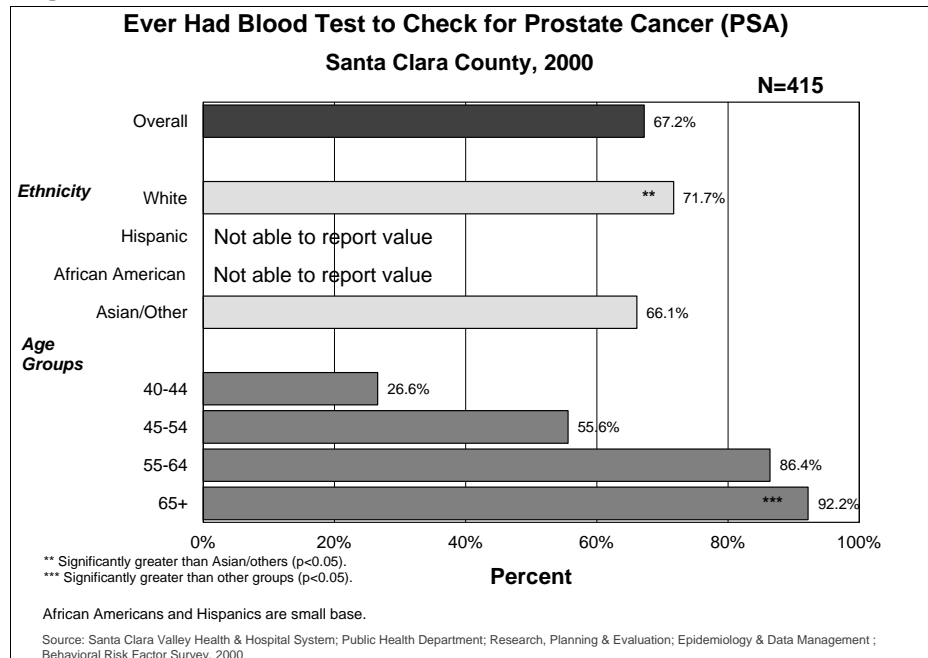
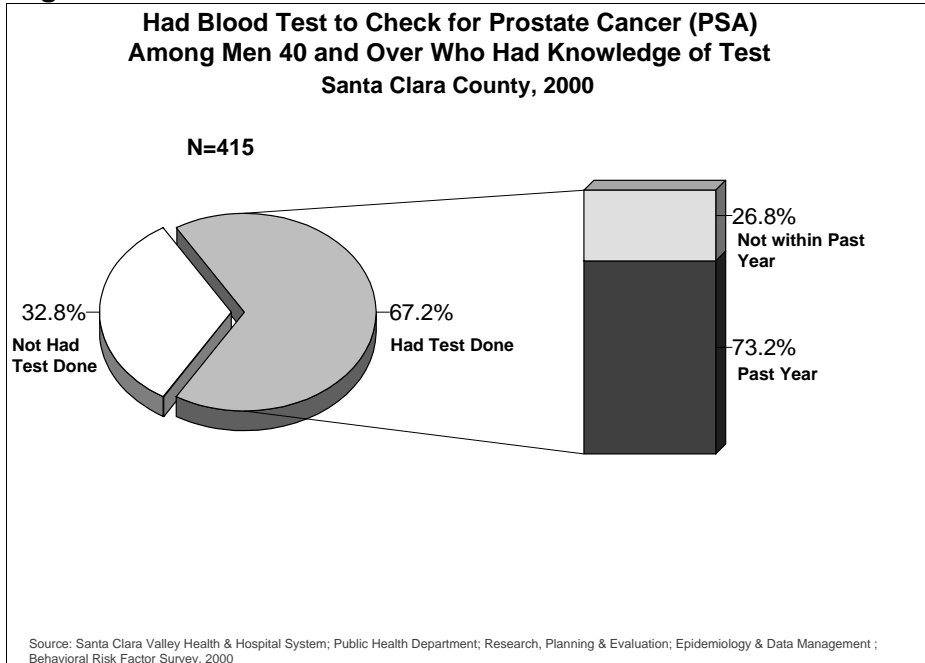


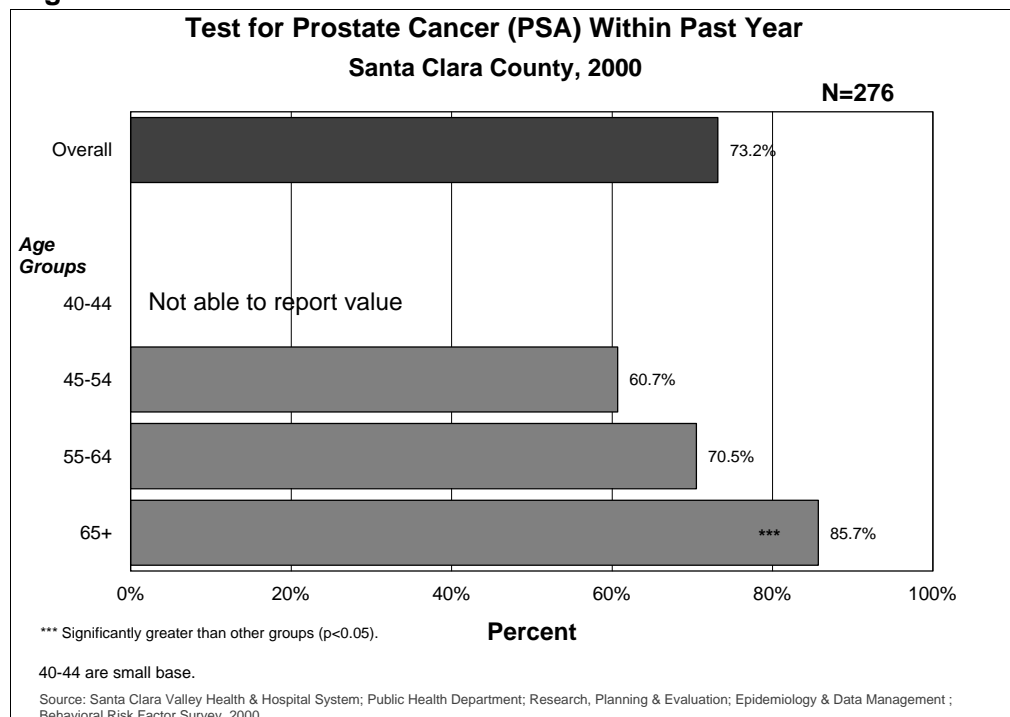
Figure 22



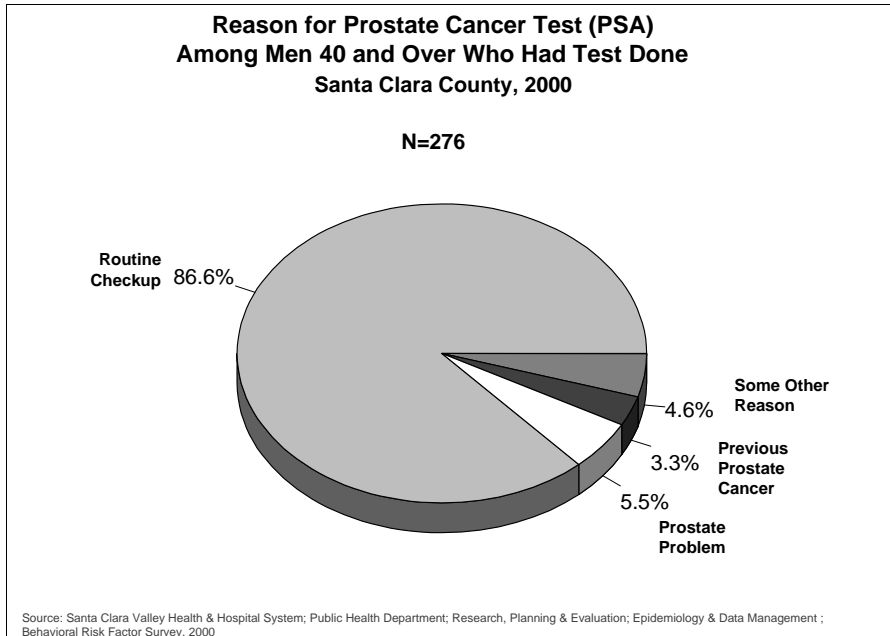
Of the male respondents who had a PSA done, 73.2% reported having the test within the past year (Figure 22).

The proportion of respondents who reported having the PSA test done within the past year increased with age. (Figure 23).

Figure 23



**Figure 24**



Reasons that were given for having the PSA test included routine checkup (86.6%) and previously being diagnosed with prostate cancer (3.3%) (Figure 24).

**Figure 25**

Significantly more males age 55 to 64 reported having prostate cancer screening during a routine checkup than males 65 years and older (Figure 25). On the other hand, more males age 65 and older had a PSA because of previous prostate cancer (8.4%) compared to males age 55-64 (1.0%) (figure not shown).

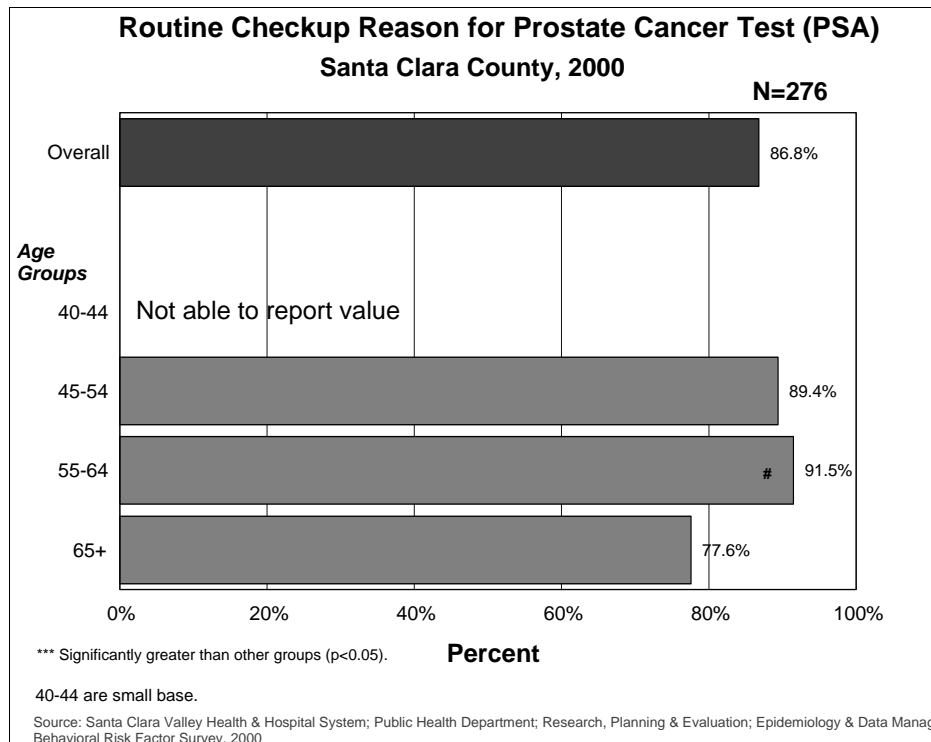


Table 10

**Ever Had Blood Test (PSA) to Check for Prostate Cancer**  
**Santa Clara County, 2000**

Independent Sociodemographic Variables	Unadjusted Odds Ratio	Confidence Interval
<b>Poor or Fair Health Status (Yes=1, No=0)</b>	<b>2.01</b>	<b>1.08, 3.76</b>
Chronic Drinker (Yes=1, No=2)	1.1	0.55, 2.17
<b>Current Smoker (Yes=1, No=0)</b>	<b>0.53</b>	<b>0.31, 0.91</b>
<b>Risk for Second Hand Smoke (Yes=1, No=0)</b>	<b>0.5</b>	<b>0.31, 0.81</b>
Overweight or Obese (Yes=1, No=0)	0.8	0.52, 1.22
<b>No Health Plan (Yes=1, No=0)</b>	<b>0.32</b>	<b>0.13, 0.76</b>
<b>Had to See Physician in Past Year (Yes=1, No=0)</b>	<b>1.51</b>	<b>1.02, 2.23</b>
<b>Could Not Pay to See Physician (Yes=1, No=0)</b>	<b>0.38</b>	<b>0.15, 0.98</b>
<b>Last Checkup Three Plus Years Ago (Yes=1, No=0)</b>	<b>0.12</b>	<b>0.07, 0.21</b>
Less Than High School Education (Yes=1, No=0)	0.71	0.31, 1.61
Below 100% Poverty Level (Yes=1, No=0)	0.69	0.25, 1.90
Below 200% Poverty Level (Yes=1, No=0)	0.61	0.34, 1.06
<b>Not Employed (Yes=1, No=0)</b>	<b>7.78</b>	<b>4.30, 14.10</b>
<b>White (Yes=1, No=0)</b>	<b>1.93</b>	<b>1.28, 2.92</b>
<b>Hispanic (Yes=1, No=0)</b>	<b>0.43</b>	<b>0.25, 0.73</b>
Asian/other (Yes=1, No=0)	0.94	0.53, 1.67
<b>Age 55 and over (Yes=1, No=0)</b>	<b>10.08</b>	<b>6.14, 16.55</b>

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

Variables that were found to be associated with prostate cancer screening included gender, age, race/ethnicity, employment status, income level, smoking status, perception of one's health, and utilization of healthcare (Table 10).



After adjusting for confounding, only three variables remained significantly associated with having the PSA test (Table 11). Male respondents age 40 years and older who had the PSA test were more likely to not be employed (OR: 2.01; 95% CI: 1.17 – 3.43) and be 55 years old or older (OR: 6.91; 95% CI: 3.99 – 11.98). In addition, 85% of males who did not have a routine checkup in 3 years were less likely to be screened for prostate cancer (OR: 0.15; 95% CI: 0.08 – 0.28).

**Table 11**

**Ever Had Blood Test (PSA) to Check for Prostate Cancer**  
**Santa Clara County, 2000**

	Adjusted Odds Ratio	Confidence Interval
<b>Last Checkup Three Plus Years Ago (Yes=1, No=0)</b>	<b>0.15</b>	<b>0.08, 0.26</b>
<b>Not Employed (Yes=1, No=0)</b>	<b>2.01</b>	<b>1.17, 3.43</b>
<b>Age 55 and over (Yes=1, No=0)</b>	<b>6.91</b>	<b>3.99, 11.98</b>

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

### Summary of Key Findings for Prostate Cancer

Prostate cancer is a serious issue for older men, and screening using the Prostate Specific Antigen (PSA) test is a tool for detecting the disease. Survey results found that 71% of male respondents age 40 and older have heard of the PSA test, especially White and older males. Of this group, 67.2% have had the screening test. Of those who had received a PSA test, 73.2% had the test done within the past year. The majority of respondents had the test done as part of a routine checkup (86.6%), whereas 3.3% reported being screened due to prior diagnosis of prostate cancer.

Variables associated with prostate cancer screening included not being employed, being at least 55 years or older, and having had a routine physical checkup done in the past 3 years.

Disparities among race/ethnic groups do exist in regards to prostate cancer knowledge (CDC, 2001). Due to limitations in sample size (base), those differences were not clear for all questions in this survey. Among respondents asked if they had heard of PSA test, fewer Hispanics and Asian/others responded. This may signify that knowledge about screenings and treatment for prostate cancer is less common among these groups. Education could help to increase prostate cancer awareness.

## breast cancer screening

Breast cancer is the most common form of cancer among women in the United States and can also be diagnosed in men. The National Alliance of Breast Cancer Organizations (n.d.) website states that over 180,000 new breast cancer cases in women are diagnosed each year in the United States.

According to the Healthy People 2010 report (DHHS, 2000), death from breast cancer can be reduced substantially if the tumor is discovered at an early stage. Although regular breast exams are a method of prevention, mammography is the most effective method for detecting early malignancies. The CDC (n.d.) asserts that mammography is the best way to detect breast cancer in its earliest, most treatable stage. On average, mammography can detect malignancy 1 to 3 years before a breast lump can be felt. Mammography also detects cancers too small to be felt during a clinical breast exam (CBE). Moreover, Kerlikowske et al (1995, as cited by DHHS, 2000) concluded that regular mammography screening can reduce breast cancer deaths by 20 to 39% in women age 50 to 74 years and about 17% in women age 40 to 49 years. The National Cancer Institute's (2002) current recommendation for breast cancer screening is for every female to receive a breast exam and a mammography starting at age 40 every 1 to 2 years. Women who are at higher than average risk of breast cancer should seek expert medical advice about whether they should begin screening before age 40 and the frequency of screening.

Risk factors for breast cancer include age, family history of breast cancer, reproductive history, mammographic densities, previous breast disease, race/ethnicity, and being overweight. Although most of these risk factors are biological, avoiding weight gain, especially among postmenopausal women, is one method for reducing risk.

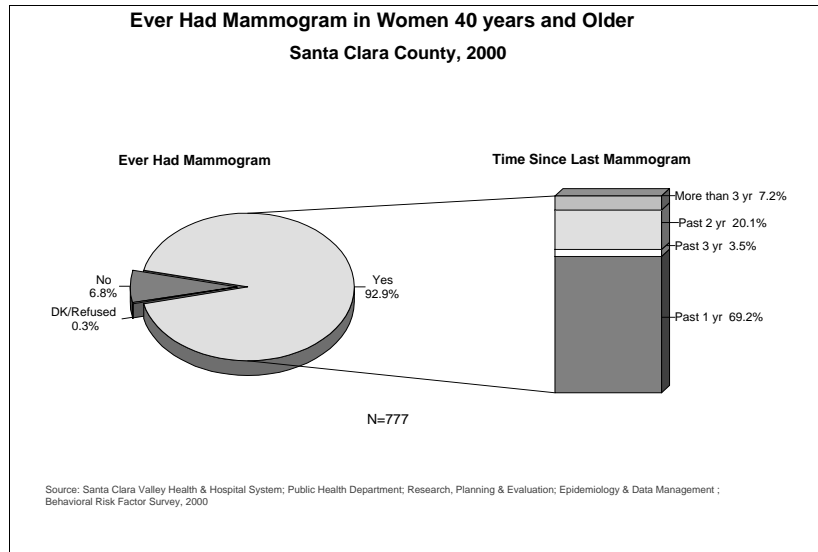
### Healthy People 2010 Objectives: Breast Cancer Screening

Objectives		Target
3-3	Reduce the breast cancer death rate	22.3 deaths per 100,000 females
3-13	Increase the proportion of women age 40 years and older who have received a mammogram within the preceding 2 years	70%

## Data Analysis of BRFs Responses for Breast Cancer Screening

**Figure 1**

For the Breast Cancer Screening section in this report, data on mammograms and clinical breast exams (CBEs) were analyzed for women age 40 and older because this is the age that the National Cancer Institutes recommends routine screening for breast cancer. Figure 1 shows the prevalence of breast cancer screening by mammogram. The proportion of women age 40 and older who reported ever having a mammogram was 92.9% (95% CI: 91.0, 94.8). Approximately 89% of these mammograms were done within the past 2 years.



Approximately 93% of all mammograms were done as a part of routine physical checkups and only 7% of mammograms were done because of breast problems or carcinoma (data not shown).

**Figure 2**

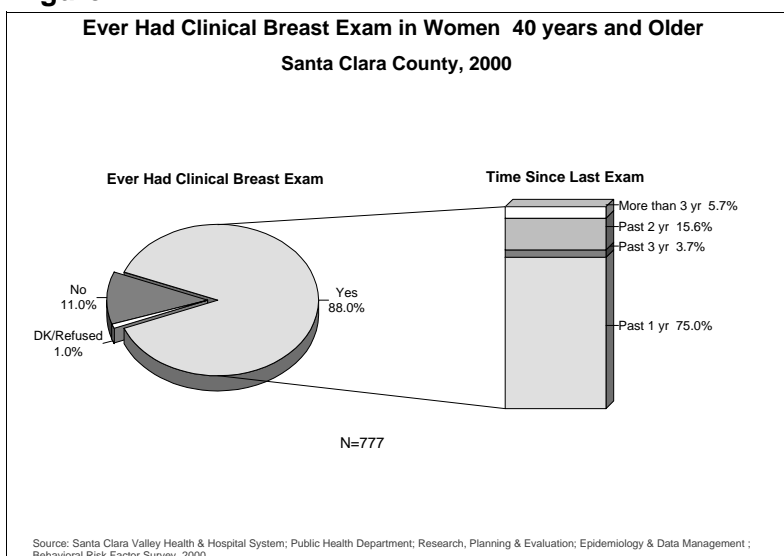
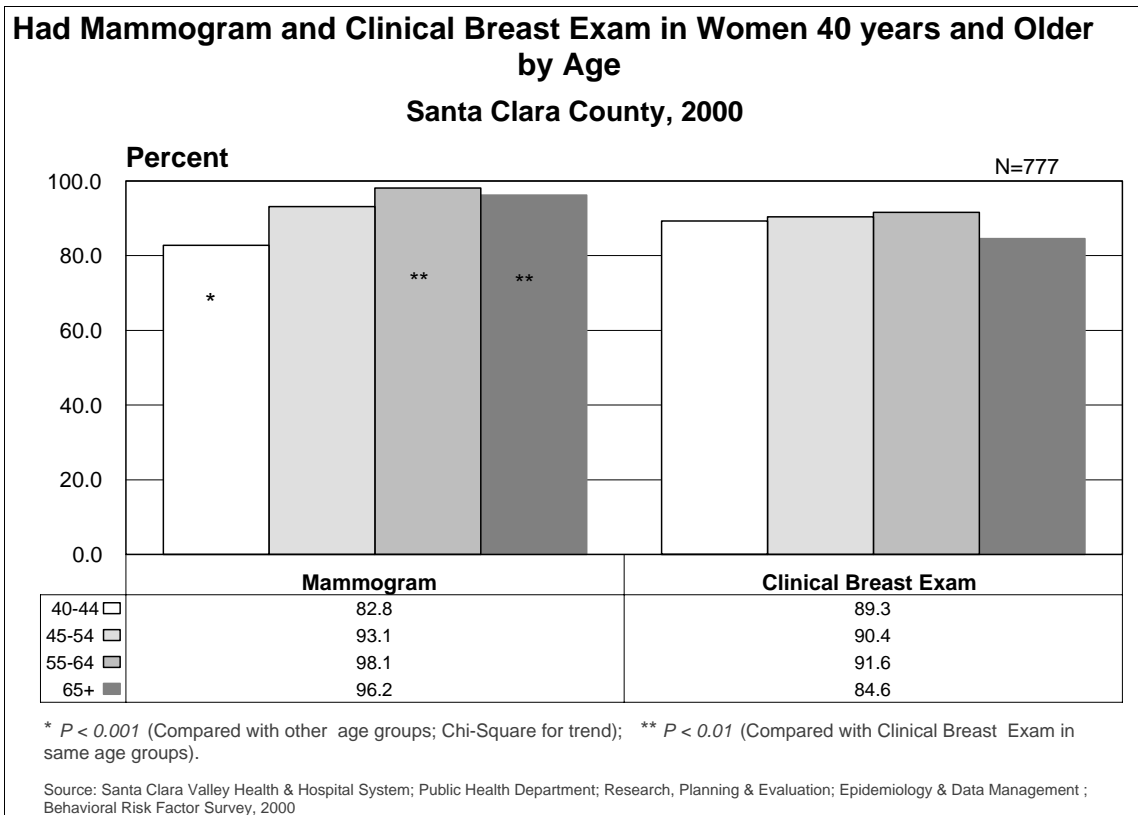


Figure 2 shows the proportion of women who ever had a clinical breast examination (CBE) and the time since they had their CBE. Eighty eight percent (95% CI: 85.6, 90.4) of women 40 years and older in Santa Clara County had undergone a CBE. Approximately 91% of these women had the exam within the past 2 years. The majority of CBEs (94%) occurred during a routine physical checkup (data not shown).

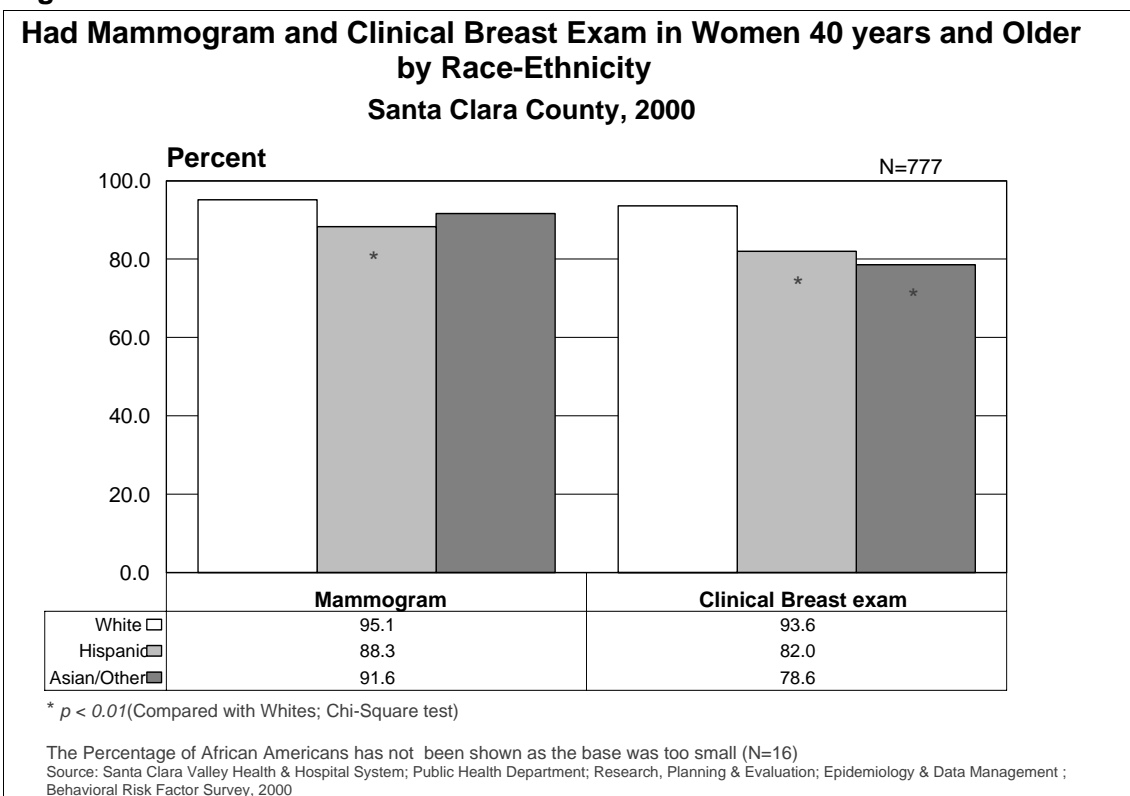
More mammograms were performed in older females than younger females (Figure 3). The percentage of females having mammograms increased significantly as age increased. However, this trend was not observed for clinical breast exams (CBEs). It is interesting to note that older women, especially the 65+ age group, had significantly more mammograms done (96%) than CBEs (85%) ( $P < 0.01$ ).

**Figure 3**



As shown in Figure 4, the percentages of females having mammograms (95.1%) and clinical breast exams (CBEs) (93.6%) were significantly higher among Whites than Hispanics and Asian/others. Hispanic females had the lowest proportion of having mammograms (88.3%) and Asian/others had the least proportion of receiving CBEs (78.6%).

**Figure 4**



Income level had a positive association with breast cancer screening (Figure 5). Women with a household income less than \$35,000 reported lower proportions of getting mammograms and clinical breast exams (CBEs) than in other income groups. Women who reported having CBEs were linearly associated with higher income. For example, 97% of women with a household income more than \$75,000 had a clinical breast exam, as opposed to only 75% of women with a household income lower than \$35,000.

**Figure 5**

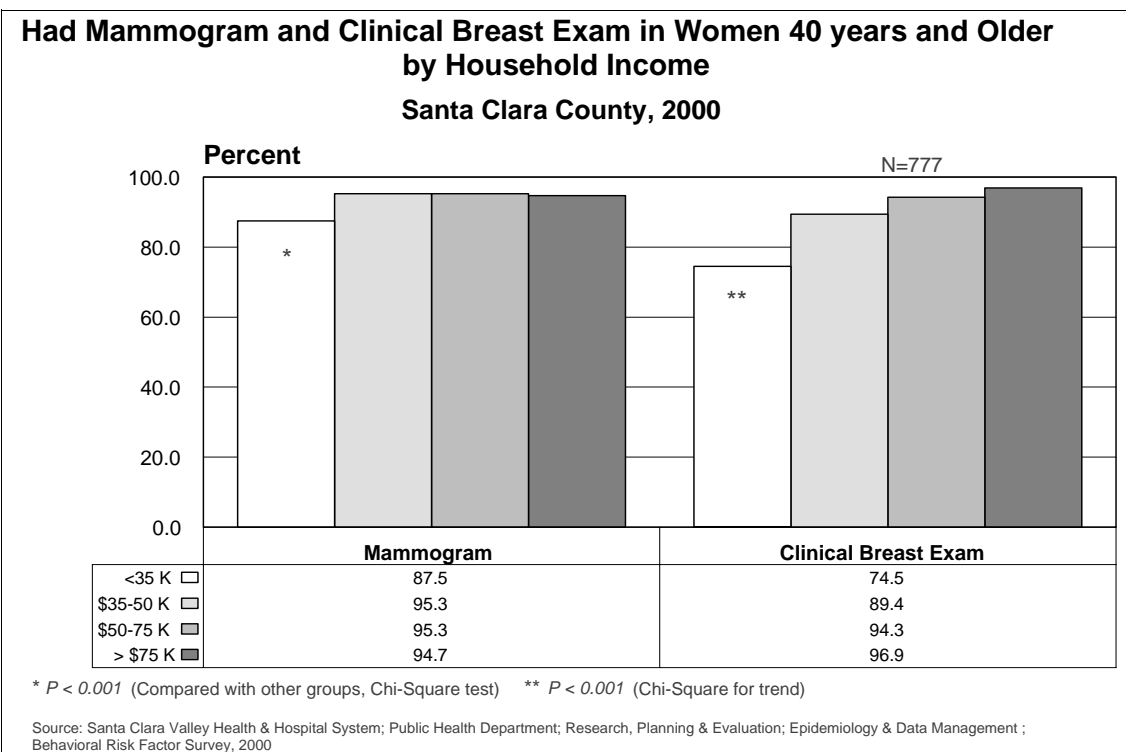
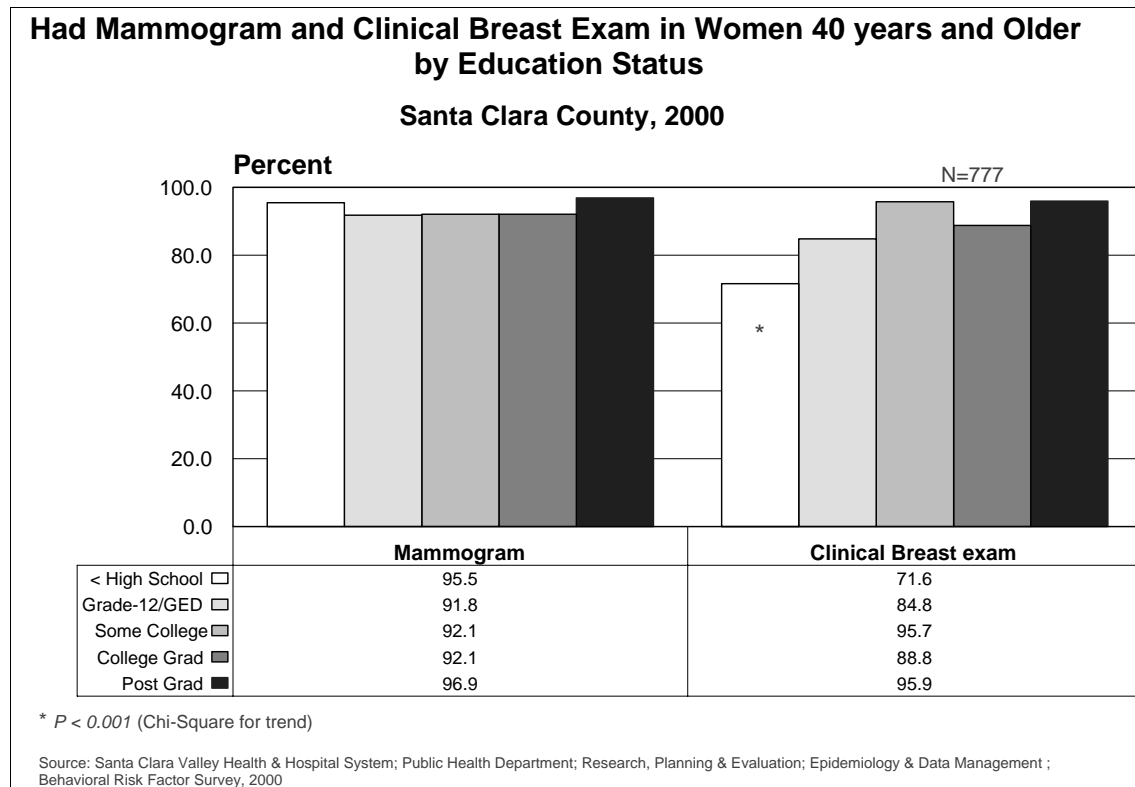


Figure 6



The proportion of women obtaining a mammogram did not differ significantly by their level of education. Results showed that more women had clinical breast exams done as their years of education increased (Figure 6).



The association of socio-demographic variables (ethnicity, status of health plan coverage, physical checkups, education level, household income, age, employment status, and marital status) with having breast cancer screening (mammograms), has been presented as both unadjusted and adjusted (in logistic regression models) odd ratios (ORs) in Table 1 and 2.

**Table 1**

**Socio-demographic Predictors for Having a Mammogram: Unadjusted Odds Ratios**  
**Santa Clara County, 2000**

Variables	Odds Ratio	95% CI
White (White=1, Non-White=0)	<b>2.07</b>	<b>1.15, 3.75</b>
Hispanic (Hispanic=1, Non-Hispanic=0)	<b>0.46</b>	<b>0.24, 0.90</b>
Asian (Asian/other=1, All others=0)	0.72	0.36, 1.42
Health plan (Yes=1, No=0)	2.11	0.71, 6.29
Physical check-up within 1 year (Yes=1, No=0)	<b>2.33</b>	<b>1.28, 4.22</b>
Education (< than college=0, >=College=1)	1.05	0.57, 1.93
Household income (< 50 K=0, >=50 K=1)	<b>2.07</b>	<b>1.11, 3.89</b>
Age (<55 yr=0, >=55 yr=1)	<b>3.91</b>	<b>1.91, 7.97</b>
Employed (Yes=1, No=0)	0.71	0.40, 1.29
Married (Yes=1, No=0)	<b>2.6</b>	<b>1.44, 4.71</b>

Statistically significant ORs and 95% CIs are shown in bolds.

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

Unadjusted odds ratios show that non-Hispanic Whites were twice as likely to have mammograms done (OR: 2.07, 95% CI: 1.15, 3.75). Women who were married (OR: 2.60; 95% CI: 1.44, 4.71) and had a routine physical checkup (OR: 2.33; 95% CI: 1.28, 4.22), or had a household income greater than \$50,000 (OR: 2.07; 95%CI: 1.11, 3.89) were more than twice as likely to have a mammogram. Furthermore, women who were 55 years or older were four times more likely to have a mammogram (OR: 3.91, 95% CI: 1.91, 7.97).

Adjusted odd ratios show that women who were married, had a routine physical exam within the past year, had a higher household income, or were 55 years or older, were more likely to have had breast cancer screening by mammograms.

**Table 2**

**Socio-demographic Predictors for Having a Mammogram: Adjusted Odds Ratios**

**Santa Clara County, 2000**

Variables	Odds Ratio	95% CI
Physical check-up within 1 year (Yes=1, No=0)	<b>2.75</b>	<b>1.41 ,5.50</b>
Household income (< 50 K=0, >=50 K=1)	<b>3.06</b>	<b>1.40, 6.69</b>
Age ( <55 yr=0, >=55 yr=1)	<b>6.53</b>	<b>2.62, 16.28</b>
Married (Yes=1, No=0)	<b>2.85</b>	<b>1.40, 5.79</b>

Statistically significant ORs and 95% CIs are shown in bolds.

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

**Summary of Key Findings for Breast Cancer Screening**

The Santa Clara County 2000 BRFs data suggests that overall, women 40 years and older receiving breast cancer screening within the last 2 years (82.9%) met the 2010 target of 70%. However, disparities among various subgroups, such as age, race, economic, and educational status still exist. Hispanic women had the lowest proportion of breast cancer screening, followed by Asians/others. Women in lower income levels, younger age groups, and with less years of education represented the lowest proportion of having breast cancer screening by mammograms or clinical breast exams. Additionally, unmarried women and those who did not have routine physical checkups were at risk for not being screened for breast cancer.

## pap smear test

A Pap (Papanicolaou) smear test, or simply Pap test, is a screening procedure involving microscopic examination of cells collected from the cervix (DHHS, 2000). The Pap test is used to detect changes in the cervix that may lead to cancer and noncancerous conditions, such as infection or inflammation. Although it may help detect cancerous cells around the cervix, it is not a diagnostic test for cervical cancer. According to W. Rich (n.d.), Clinical Professor of Obstetrics and Gynecology at the University of California in San Francisco, the Pap test does not usually detect cancers of the uterus, ovaries and fallopian tubes.

Healthy People 2010 report (DHHS, 2000) asserts that cervical cancer is the 10th most common cancer among females in the United States, with an estimated 12,800 new cases in 2000, accounting for 1.7% of cancer deaths among females. The report also notes that the number of new cases of cervical cancer is higher among females from other racial and ethnic groups compared to white females. Furthermore, the risk is substantially decreased among former smokers in comparison to continuing smokers.

The cause of cervical cancer is unknown, although the National Institutes of Health (1996, as cited by DHHS, 2000) verified that current studies strongly implicate certain strains of the sexually transmitted disease, Human Papilloma Virus (HPV), as a probable cofactor in its development.

Pap test screening is recommended for all women beginning at age 18 years or at the onset of sexual activity, whichever comes earlier. Evidence shows that screening can reduce the number of deaths from cervical cancer. Schiffman et al (1996, as cited by DHHS, 2000) confirm that if cervical cancer is detected early, the likelihood of survival is almost 100% with appropriate treatment and follow-up. In other words, almost all cervical cancer deaths could be avoided if all females complied with screening and follow-up recommendations.

### Healthy People 2010 Objectives: Pap Smear Test

Objectives		Target
3-4	Reduce the death rate from cancer of the uterine cervix	2.0 deaths per 100,000 females
3-10h	Increase the proportion of primary care providers who counsel about Pap tests	85%
3-11	Increase the proportion of women who receive a Pap test	
a	Women age 18 years & older who have ever received a Pap test	97%
b	Women age 18 years and older who received a Pap test within the preceding 3 years	90%

Figure 7 illustrates the prevalence of cervical cancer screening using the Pap smear test. The prevalence of cervical cancer screening among women 18 years and over was 91.3% (95% CI: 89.8, 92.9). This was slightly lower than national (94.8%) and California-state (94.2%) rates. Approximately 86% of females had a Pap smear test within the past 2 years and 91% within the past 3 years. A majority (92%) of women who ever had a Pap smear test received the screening as part of their routine physical checkups (figure not shown), which also mirrors national (95%) and state (92%) responses. Only 4.4% of women had the Pap test because of some underlying problems, and 3.5% had some other/unknown reasons.

**Figure 7**

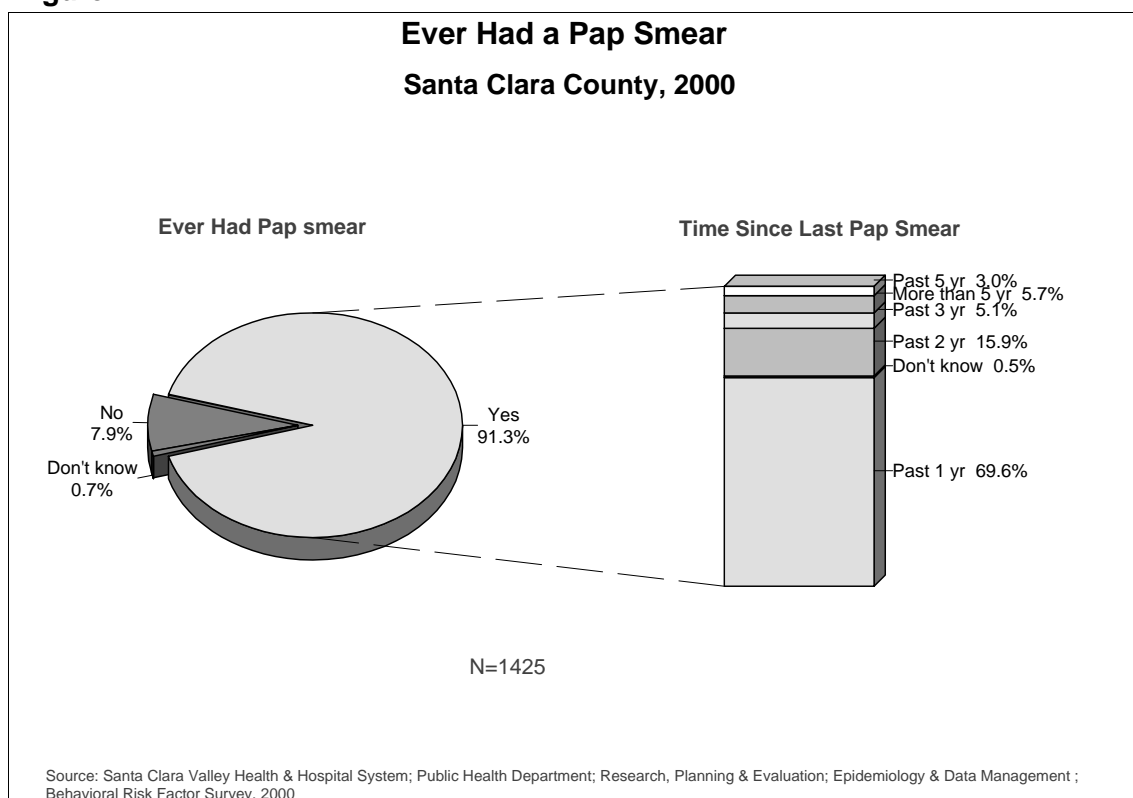
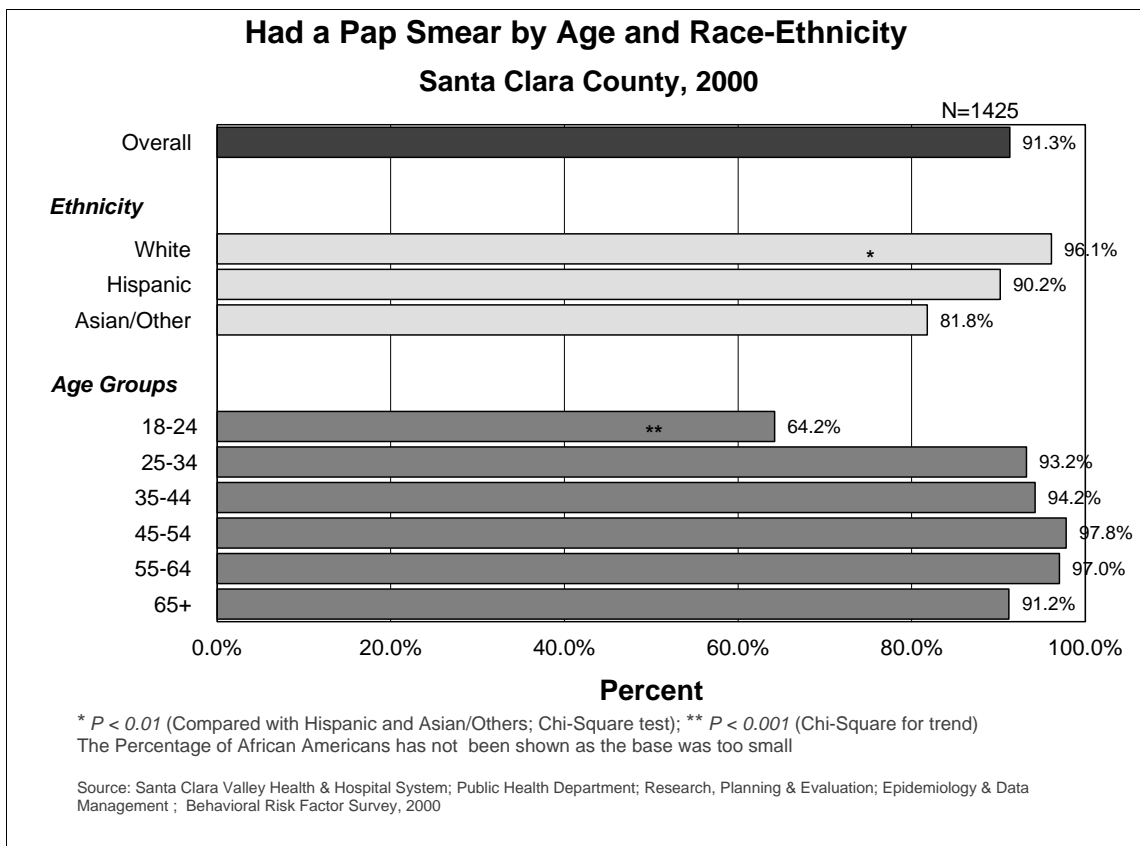


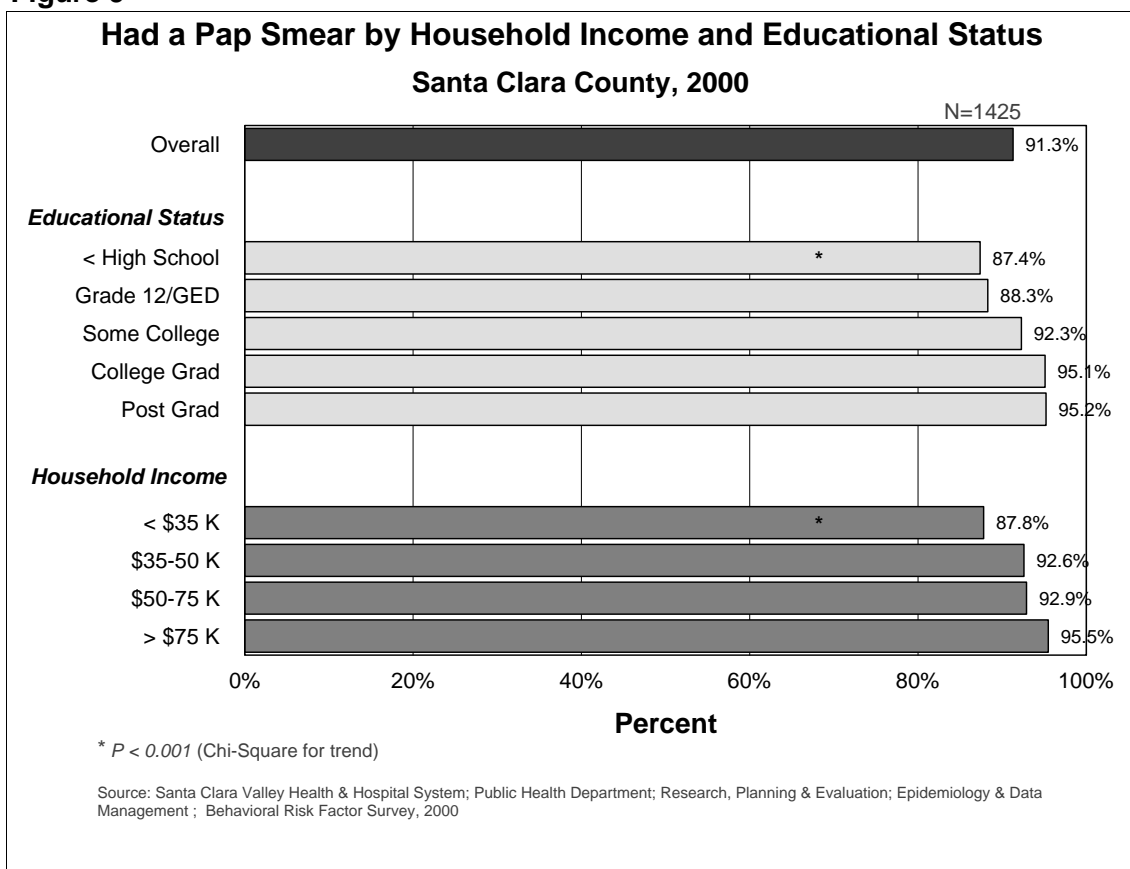
Figure 8



A distinct disparity of having Pap smear tests was noted across racial/ethnic groups, as illustrated in Figure 8. According to survey responses, 96% of White females and 91% of Hispanic females reported ever having a Pap smear test, whereas only 82% Asian/other females received the screening test. Furthermore, the proportion of respondents who had a Pap smear test increased significantly with increasing age, ranging from 64% reported by women age 18 to 24 to over 97% by women age 45 and older.

Figure 9 shows the relationship between cervical cancer screening by Pap smear testing and women's education levels and household income. Results depicted that women who reported higher education and income levels also reported a higher prevalence of having Pap smear tests. The prevalence for cervical cancer screening ranged from 87% for women with less than a high school education to 95% for those who had a postgraduate degree. Similarly, the prevalence for having a Pap smear test increased as household income levels increased.

**Figure 9**



**Table 3**

**Socio-demographic Predictors for Having a Pap Smear: Unadjusted Odds Ratios**  
**Santa Clara County, 2000**

Variables	Odds Ratio	95% CI
White (White=1, Non-White=0)	<b>3.76</b>	2.36, 6.00
Hispanic (Hispanic=1, Non-Hispanic=0)	0.76	0.47, 1.22
Asian (Asian/other=1, All others=0)	<b>0.30</b>	<b>0.20, 0.46</b>
Health plan (Yes=1, No=0)	<b>3.05</b>	<b>1.74, 5.34</b>
Physical check-up within 1 year (Yes=1, No=0)	<b>1.65</b>	<b>1.09, 2.51</b>
Education (< than college=0, >=College=1)	<b>2.15</b>	<b>1.42, 3.26</b>
Household income (< 50 K=0, >=50 K=1)	<b>2.19</b>	<b>1.39, 3.45</b>
Age (<40 yr=0, >=40 yr=1)	<b>4.83</b>	<b>2.99, 7.81</b>
Employed (Yes=1, No=0)	<b>1.51</b>	<b>1.0, 2.29</b>
Married (Yes=1, No=0)	<b>2.69</b>	<b>1.77, 4.09</b>

Statistically significant ORs and 95% CIs are shown in bolds.

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

Unadjusted ORs, illustrated in Table 3, suggest that being White, having a job, having a health plan, having a physical checkup done during the past year, having a college degree or more, having a household income greater than \$50,000, being 40 years or older or being married were strongly associated with having Pap smear tests for cervical cancer screening. Asian women were also less likely to have a Pap test.

**Table 4**

Adjusted ORs (Table 4) suggest that married women were 2.9 times more likely to have a Pap smear test (OR: 2.88; 1.69, 4.89) than unmarried women. Women 40 and older had a 3.91 odds (95% CI: 2.22, 6.89) of having had a Pap test than younger women. Furthermore, women with more education were 2.5 times more likely to have a Pap smear test. Cervical cancer screening among Asian/other women was 88% less than other ethnic groups.

**Socio-demographic Predictors for Having a Pap Smear: Adjusted Odds Ratios**  
**Santa Clara County, 2000**

Variables	Odds Ratio	95% CI
Married (Yes=1, No=0)	<b>2.88</b>	<b>1.69, 4.89</b>
Age (<40 yr=0, >=40 yr=1)	<b>3.91</b>	<b>2.22, 6.89</b>
Education (< than college=0, >=College=1)	<b>2.47</b>	<b>1.40, 4.39</b>
Asian (Asian/other=1, All others=0)	<b>0.12</b>	<b>0.03, 0.54</b>
Employed (Yes=1, No=0)	1.63	0.99, 2.66

Statistically significant ORs and 95% CIs are shown in bolds.

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

**Summary of Key Findings for Pap Smear Test**

Overall, the prevalence of cervical cancer screening in Santa Clara County was 91% in 2000, which is below the 2010 health target of 97%. The prevalence of cervical cancer screening among various age and racial groups was even lower. It is concluded that females who are Asian/other or Hispanic, are in a lower income level, have received less years of education, and are younger than 40 years of age need further encouragement and access to getting Pap smear tests to screen for cervical cancer. The lower proportion of non-White females getting Pap smear tests may also correlate with the fact that the number of new cases of cervical cancer is higher among non-white females at the national level.



## family planning

Family planning is the process of establishing the preferred number and spacing of one's children, selecting the means to achieve the goals, and effectively using that means (DHHS, 2000). Family planning education and contraception methods are important in achieving the national goal of reducing unintended pregnancies and increasing planned pregnancies. In 1997, the National Center for Health Statistics (1997, as cited by DHHS, 2000) reported that half of all pregnancies in the nation are unintended, which is a higher percentage than in other developed countries. This indicates that unintended pregnancies in this country can be further reduced.

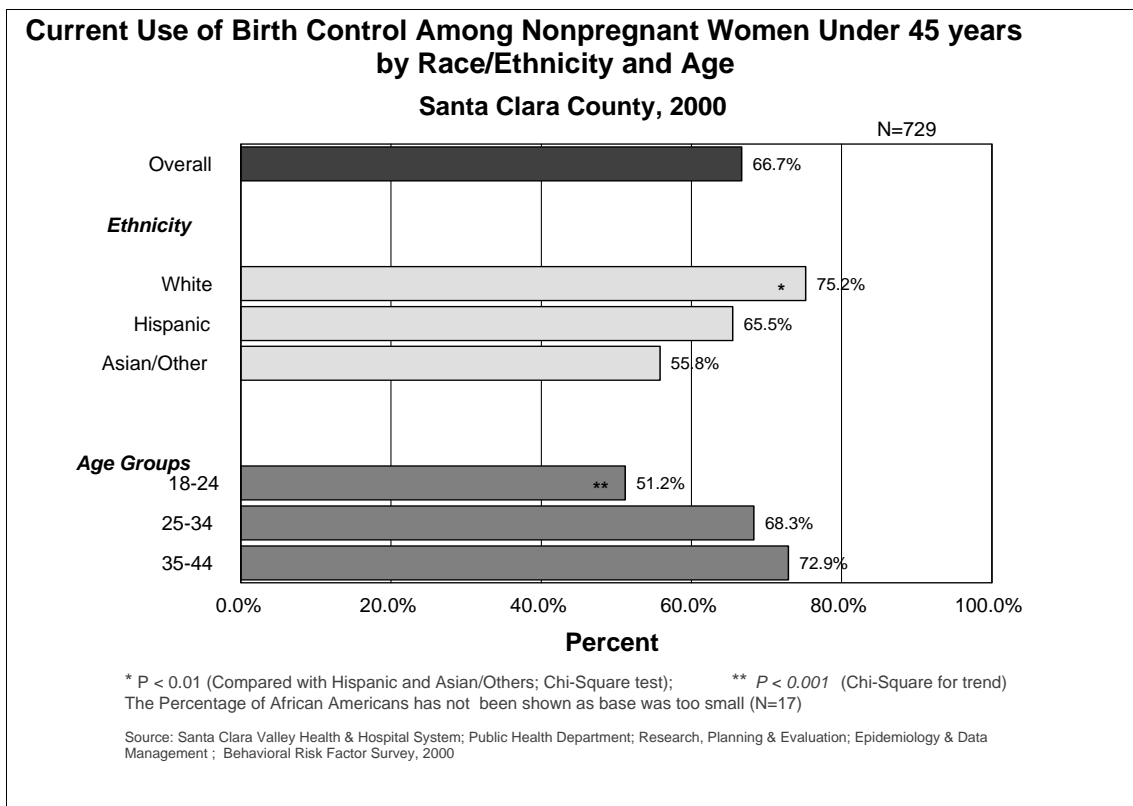
The Healthy People 2010 report (DHHS, 2000) adds that family planning services are also beneficial in providing opportunities for individuals to receive medical advice and assistance in controlling if and when they get pregnant, and for health providers to offer health education and related medical care.

### Healthy People 2010 Goal and Objectives: Family Planning

Goal: Improve pregnancy planning and spacing and prevent unintended pregnancy		
Objectives		Target
1-3f	Increase the proportion of persons appropriately counseled about unintended pregnancy (females age 15 to 44 years)	50%
9-1	Increase the proportion of pregnancies that are intended	70%
9-3	Increase the proportion of females at risk of unintended pregnancy (and their partners) who use contraception	100%
9-4	Reduce the proportion of females experiencing pregnancy despite use of a reversible contraceptive method	7%
9-6	Increase male involvement in pregnancy prevention and family planning efforts	Developmental
25-1a	Females age 15 to 24 years attending family planning clinics	3%

Data Analysis of BRFs Responses for Family Planning

Figure 10



Among non-pregnant women under age 45 years, 66.7% (95% CI: 63.1, 70.5) reported using some sort of birth control, as seen in Figure 10. The proportions of White, Hispanic, and Asian/other women and/or their partners using birth control were 75.2%, 65.5% and 55.8%, respectively. About half of the women age 18 to 24 did not use any form of birth control, which was significantly lower than the other age groups.

**Table 5**  
**Socio-demographic Predictors for Use of Birth Control: Unadjusted Odds Ratios**

**Santa Clara County, 2000**

Variables	Odds Ratio	95% CI
White (White=1, Non-White=0)	<b>2.01</b>	<b>1.42, 2.85</b>
Hispanic (Hispanic=1, Non-Hispanic=0)	0.92	0.62, 1.37
Asian (Asian/other=1, All others=0)	<b>0.53</b>	<b>0.37, 0.77</b>
Health plan (Yes=1, No=0)	1.39	0.84, 2.29
Physical check-up within 1 year (Yes=1, No=0)	1.25	0.89, 1.77
Education (< than college=0, >=College=1)	<b>1.49</b>	<b>1.05, 2.13</b>
Household income (< 50 K=0, >=50 K=1)	1.24	0.87, 1.77
Age (<30 yr=0, >=30 yr=1)	<b>1.6</b>	<b>1.14, 2.25</b>
Employed (Yes=1, No=0)	0.74	0.52, 1.04
Married (Yes=1, No=0)	<b>2.61</b>	<b>1.85, 3.68</b>

Statistically significant 95% CIs are shown in bolds

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

Table 5, shows the unadjusted Odds Ratios (OR) of socio-demographic predictors for the use of birth control. Married women were 2.6 times more likely to use birth control than unmarried women (OR: 2.61; 95% CI: 1.85, 3.68). Compared to other race/ethnic groups, White females were two times more likely to use birth control (OR: 2.01; 95% CI: 1.42, 2.85). Asian/other women reported the lowest use of birth control (ORs: 0.53; 95% CI: 0.37, 0.77). Other variables associated with birth control use were higher education levels (college or more) and older age (30 years or older).

Adjusted ORs suggested that being married, of white racial background, greater than 30 years of age, and having at least a college education were strong predictors of birth control use (Table 6).

**Table 6**

**Socio-demographic Predictors for Use of Birth Control: Adjusted Odds Ratios**

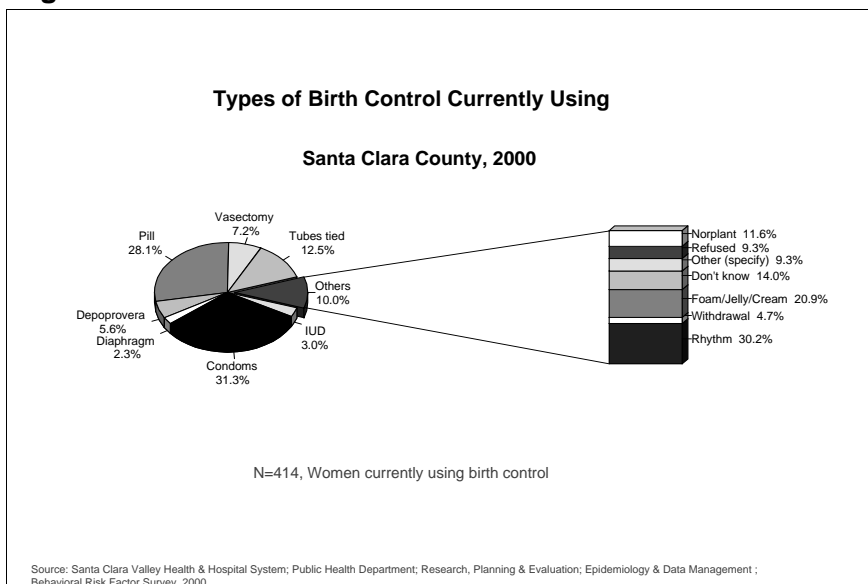
**Santa Clara County, 2000**

Variables	Odds Ratio	95% CI
Married (Yes=1, No=0)	<b>2.65</b>	<b>1.74, 4.04</b>
Education (< than college=0, >=College=1)	<b>1.75</b>	<b>1.08, 2.83</b>
White (White=1, Non-White=0)	<b>2.51</b>	<b>1.01, 6.23</b>
Physical check-up within 1 year (Yes=1, No=0)	1.46	0.99, 2.15

Statistically significant 95% CIs are shown in bolds

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

**Figure 11**



As shown in Figure 11, the most frequently used forms of birth control methods were condoms (31.3%), birth control pills (28.1%), tubal ligation (tubes tied) (12.5%), vasectomy (7.2%), and Depoprovera (5.6%).

**Table 7**

**Types of Birth Control Currently Using by Age Group**  
**Santa Clara County, 2000**

Methods	18-24 (N=62)	25-34 (N=198)	35-44 (N=218)
	n (%)	n (%)	n (%)
Tubes tied	1.5	5.3	22.8 <sup>1</sup>
Vasectomy	1.5	3.6	12.8 <sup>1</sup>
Pill	50.0	36.7	16.4 <sup>1</sup>
Condoms	32.4	37.2	29.2
Foam/Jelly/Cream	3.0	3.6	1.3
Diaphragm	0.0	3.6	2.8
Norplant	3.0	0.6	0.5
Depoprovera	7.6	6.0	4.6
Withdrawal	0.0	0.6	0.5
Rhythm	0.0	3.6	4.4
IUD	3.0	4.0	2.5
Others	3.0	0.0	1.1
DK/Refused	3.0	0.6	2.3

1:  $P < 0.05$  (Compared with other two age groups; Chi-Square test)

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

Condom use was similar among all age groups, as illustrated in Table 7. However, sterilization (tubal ligation and vasectomy) was the method of choice among those 35 to 44 years old. Compared to women 35 years and younger, older women 35 to 44 years old and their partners were 7.6 times more likely to use sterilization methods (OR: 7.6;

95% CI: 4.0, 14.5). On the other hand, younger women were more likely to use birth control pills. Women less than 35 years old and their partners were 3.5 times more likely to use birth control pills than their older counterparts (OR: 3.49; 95% CI: 2.14, 5.7).

**Table 8**

**Types of Birth Control Currently Using by Race-Ethnicity**  
**Santa Clara County, 2000**

Methods	White (N=256)	Hispanic (N=109)	Asian/Other (N=105)
	n (%)	%	%
Tubes tied	8.1	24.0 <sup>1</sup>	10.9
Vasectomy	12.9 <sup>1</sup>	2.1	2.0
Pill	37.2 <sup>1</sup>	24.0	21.0 <sup>1</sup>
Condoms	25.0	26.0	50.5
Foam/Jelly/Cream	3.3	2.1	0.0
Diaphragm	3.3	2.1	1.1
Norplant	1.4	2.1	0.0
Depoprovera	3.3	13.5 <sup>1</sup>	4.3
Withdrawal	0.4	1.0	0.0
Rhythm	1.4	3.3	7.5
IUD	4.0	2.1	3.2
Others	1.4	1.0	0.0
DK/Refused	2.4	1.0	3.2

African Americans are small in number (N=8)

1:  $P < 0.05$  (Compared with other two age groups; Chi-Square test)

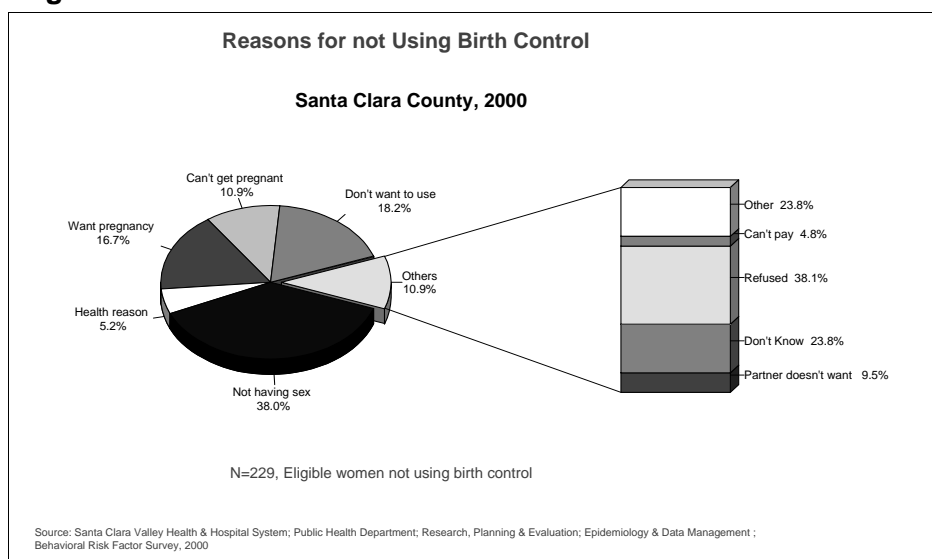
Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

Birth control methods varied across ethnic groups (Table 8). Asians/Others preferred condoms (50.5%) significantly more than Whites (25.0%) and Hispanics (26.0%). The sterilization method was chosen equally by Whites (20.9%) and Hispanics (26.1%) and was used significantly more than Asian/others.

Furthermore, the preference of sterilization method varied across ethnic/racial groups. Approximately 92% of sterilization methods among Hispanics were adopted by females (tube ligation), whereas 61% of sterilization methods among Whites were adopted by males (vasectomy).

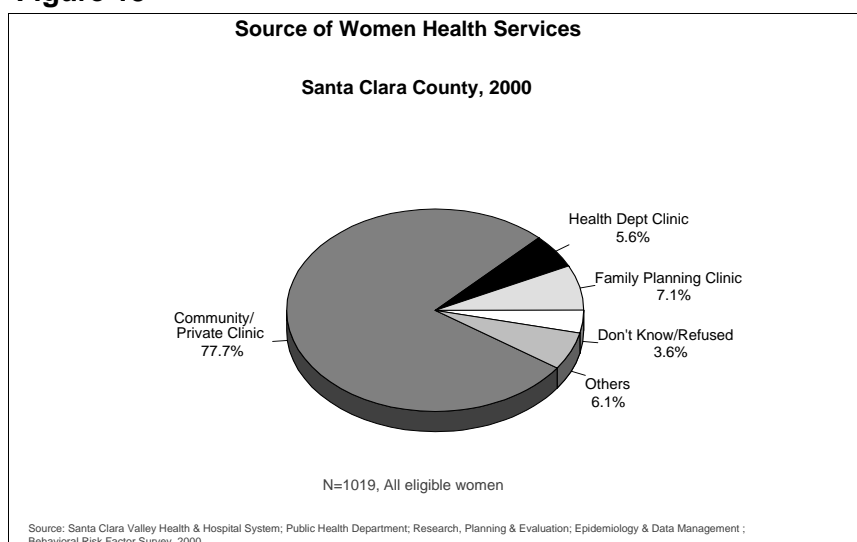
As shown in Figure 12, the five most frequent reported reasons for not using birth control were, "not having sex" (38.0%), "don't want to use contraception" (18.2%), "want pregnancy" (16.7%), "can't get pregnant" (10.9%), and "health reasons" (5.2%).

**Figure 12**



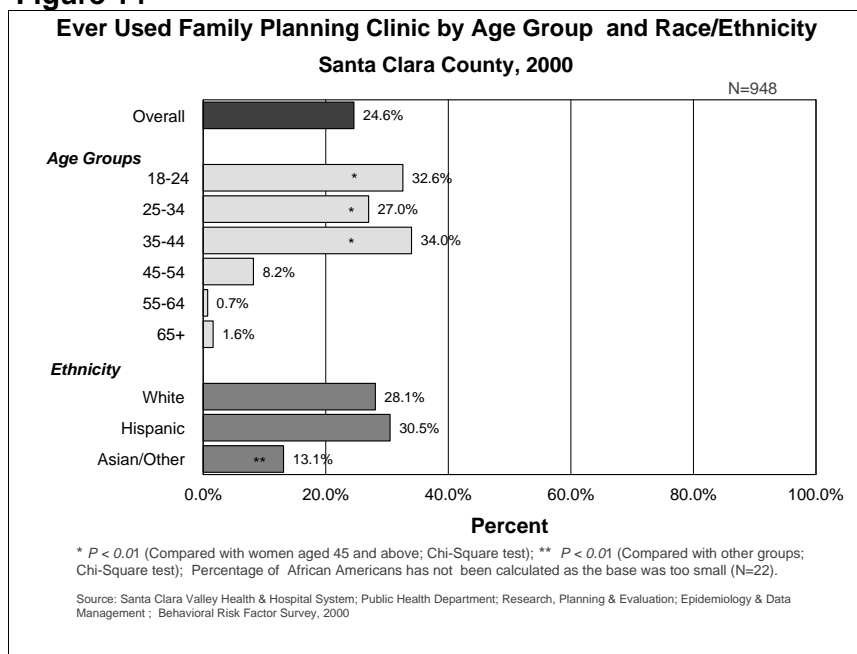
Community and private clinics were the most frequent source (77.7%) of women's health services among Santa Clara County BRFs 2000 participants. Other sources were family planning clinics (7.1%) and health department clinics (5.6%) (Figure 13).

**Figure 13**



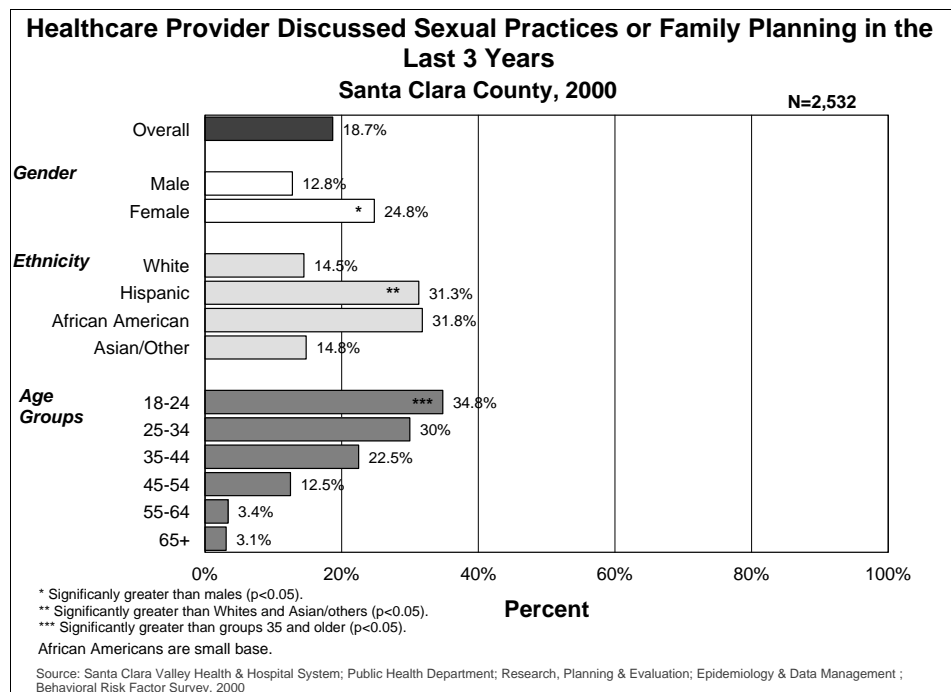
Overall, 24.6% of women reported ever using a family planning clinic, as illustrated in Figure 14. Women 45 years and younger were 5 times more likely to use family planning clinics. Only 13% of Asian/other women used family planning clinics as compared to Whites (28%) and Hispanics (31%).

**Figure 14**



Overall, 18.7% of respondents reported that a healthcare provider had discussed sexual practices or family planning with them in the past 3 years. Significantly more women, Hispanics, African Americans, and younger adults received education about sexual practices or family planning from their healthcare providers (Figure 15).

**Figure 15**



Further analysis revealed that more women under 45 years of age reported receiving sexual practices and family planning information than men in the same age group. Respondents receiving such education precipitously declined after age 44 among Whites and Asian/others, and after age 54 among Hispanics (data not shown).

### Summary of Key Findings for Family Planning Use

Survey results suggest that use of birth control among non-pregnant and sexually active women age 15 to 44 years was 67%, which is far below the national 2010 target of 100%. Asian/others were at higher risk of not using any form of birth control than other ethnic groups. Furthermore, unmarried women and those with less than a college education were at risk of not using birth control and need to be targeted for family planning education in order to decrease the chances of unintended pregnancies. In general, more Hispanics, younger adults, and women 44 years and younger reported to have received sexual practices or family planning education from their healthcare provider in the past 3 years.



## folic acid intake and awareness

Neural tube defects (NTDs), such as spina bifida and anencephaly, are types of birth defects that occur when the fetal neural tube fails to fully close, interrupting the development of the nervous system. NTDs are associated with serious long-term disability and social and financial burdens for affected individuals and their families. The CDC's Morbidity and Mortality Weekly report (1992) stated that NTDs occurred at a rate of 1 in 1000 live births. Although NTDs are caused by genetic and environmental factors, studies have shown a beneficial effect of folic acid (also folate or folacin) in reducing the prevalence of NTDs when consumed prior to pregnancy.

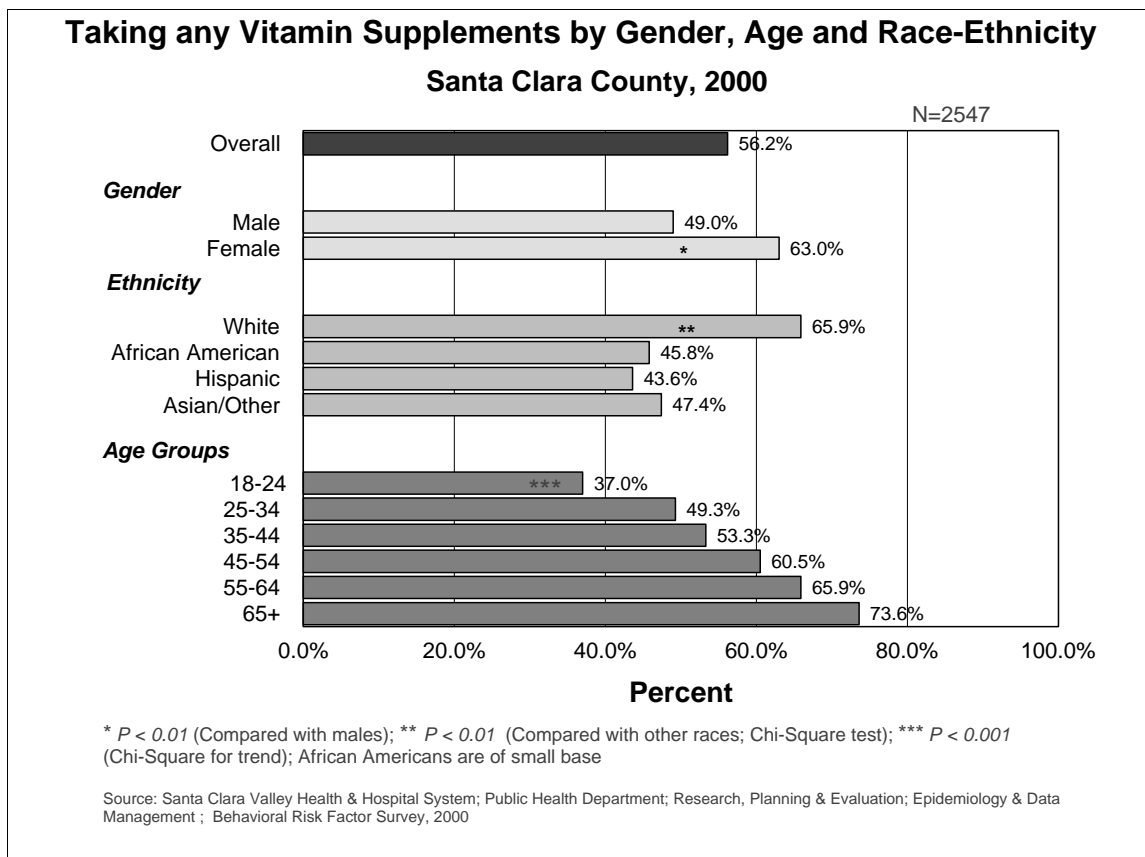
Folic acid is a B-vitamin that can be found in some foods, such as green leafy vegetables, beans, and orange juice; vitamin pills; and enriched foods, such as breads, pastas, rice, and cereals. Research compiled by the Centers for Disease Control (CDC, 1995, as cited by DHHS, 2000) have documented that consuming 400 µg (micrograms) of folic acid per day by all women prior to conception can decrease the incidence of NTDs by 50%. Hence, in 1992, the U.S. Public Health Service (PHS, as cited by the Food and Drug Administration, 1999) recommended that all women of childbearing age consume 400 µg of folic acid daily at least one month prior to conception through the first 3 months of pregnancy.

Objectives		Target
16-16	Increase the proportion of pregnancies begun with an optimum folic acid level	
a	Consumption of at least 400 µg of folic acid each day from fortified foods or dietary supplements by non-pregnant women age 15 to 44 years	80%
b	Median Red Blood Cell (RBC) folate level among nonpregnant women age 15 to 44 years	220 ng/ml

**Healthy People 2010 Objectives: Folic Acid Intake and Awareness**

Data Analysis of BRFs Responses for Folic Acid Intake and Awareness

Figure 16



Approximately 56% of Santa Clara County BRFs participants reported taking vitamin supplements (Figure 16). The proportion of females who reported taking vitamin supplements was 1.8 times higher than that reported by males (OR: 1.81; 95% CI: 1.54, 2.13). Intake of vitamin supplements was significantly greater among Whites (65.9%) than other race/ethnic groups (43.6% and 47.4% in Hispanics and Asian/others, respectively). The data also suggests that older adults had a higher prevalence rate of consuming vitamin supplements than younger people. There was a clear trend of increased vitamin supplements intake with an increase in age.

Of the respondents who took vitamin supplements, 84.3% reported specifically taking multivitamins, which guarantees folic acid consumption (Figure 17). Multivitamin intake did not differ significantly between males and females. Whites and Asian/others reported similar intake of multivitamins. However, intake of multivitamins among Hispanics was significantly lower than Whites and Asian/others. Multivitamin intake was similar across different age groups except the 65+ age group, in which multivitamin intake dropped significantly.

**Figure 17**

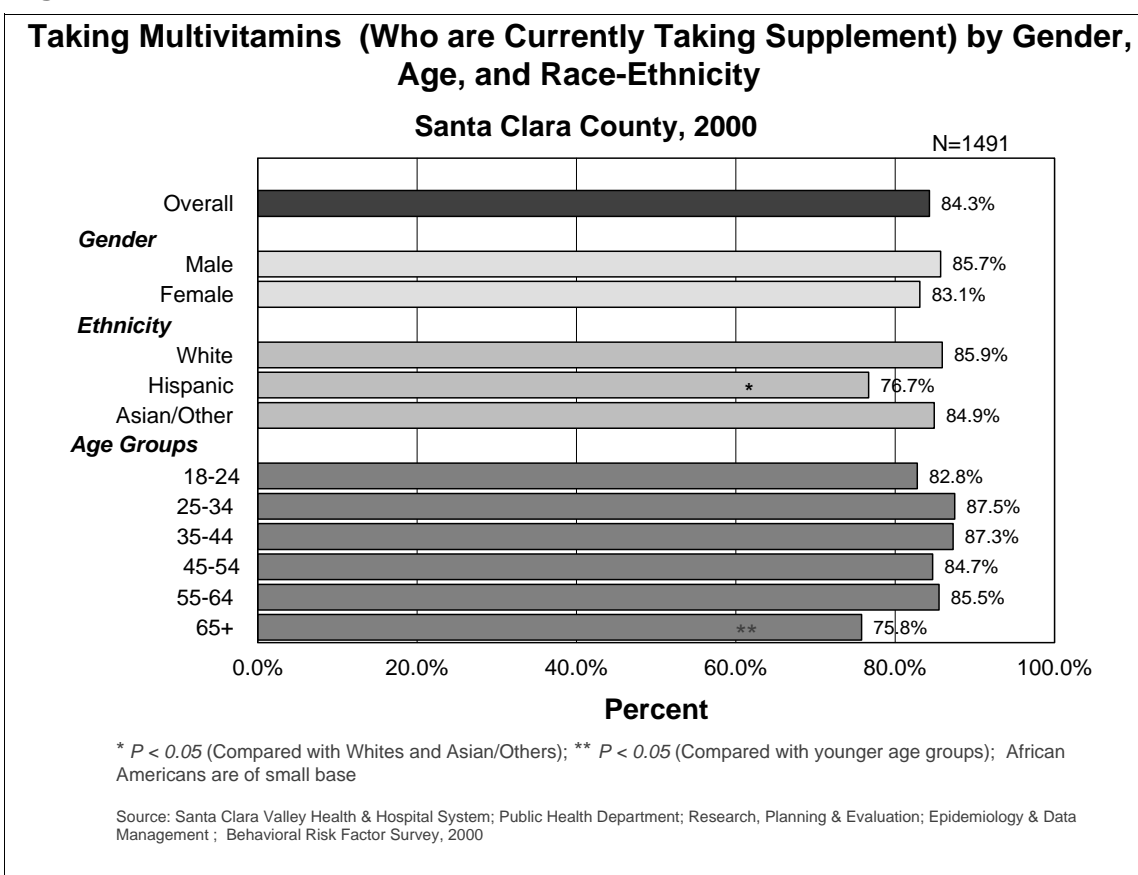
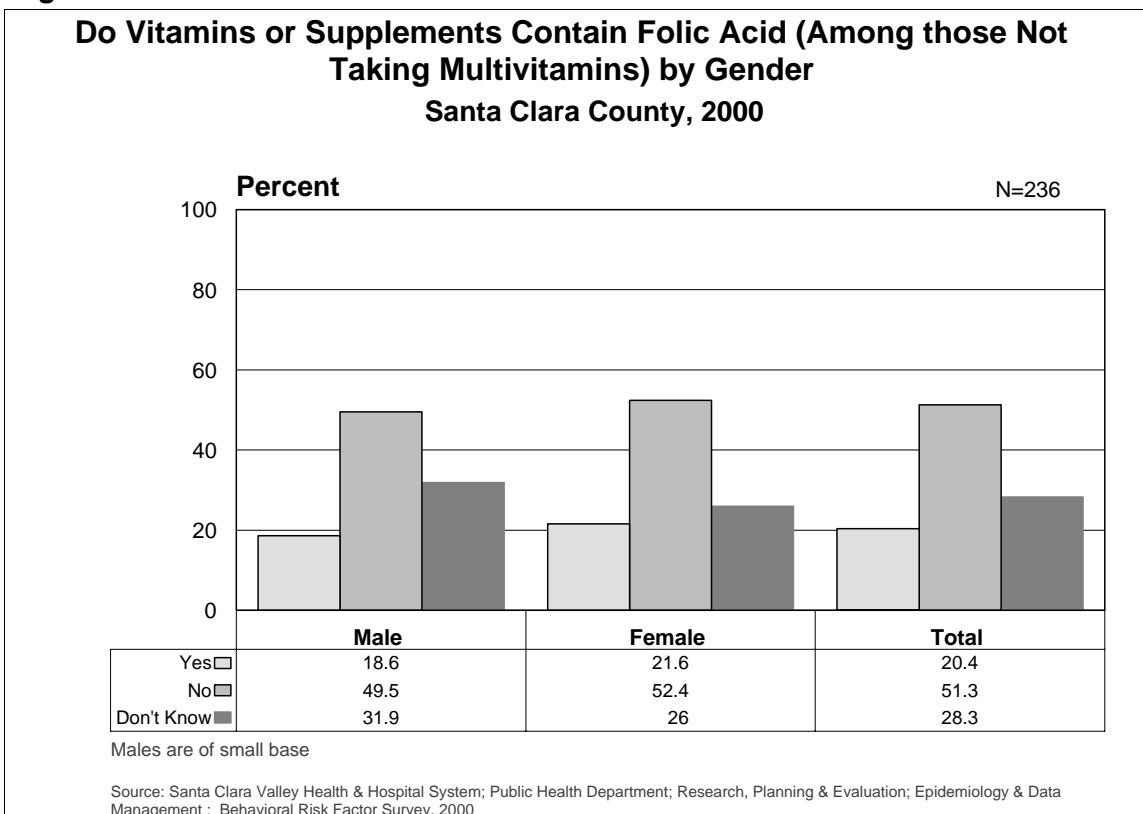


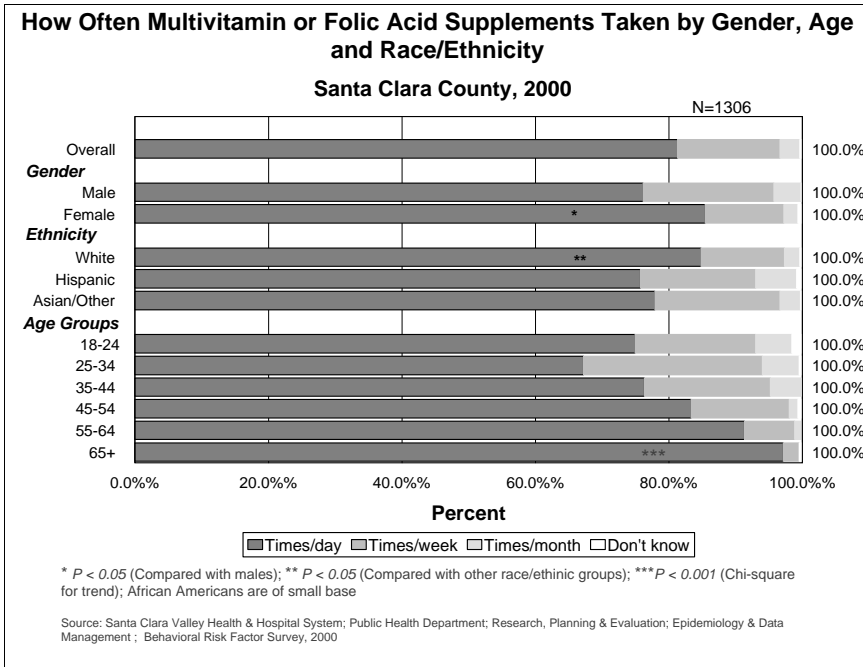
Figure 18 shows that of the remaining respondents who were taking vitamin supplements, but not multivitamins, 20.4% were taking folic acid-containing pills/vitamins.

**Figure 18**

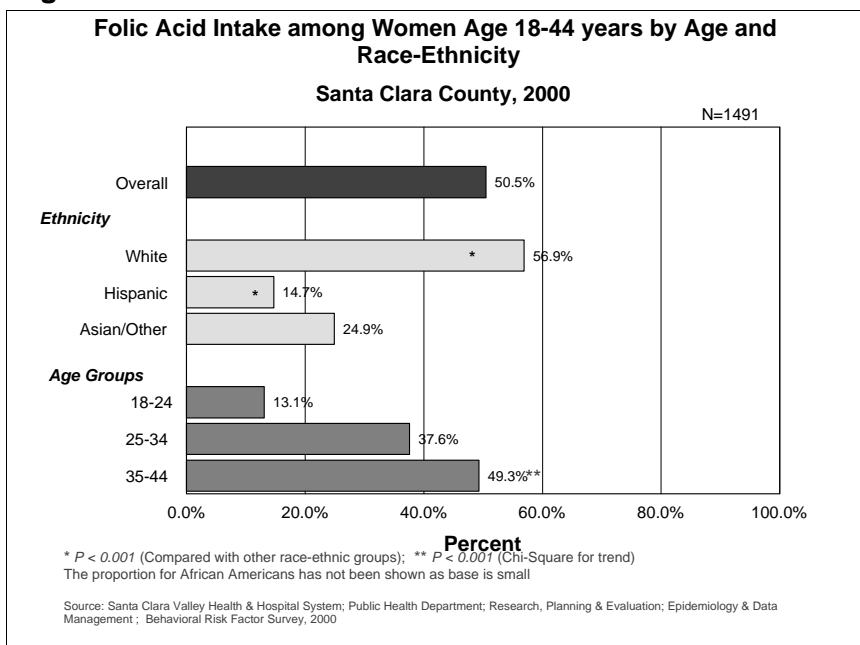


**Figure 19**

Of those who reported taking supplements, 81% of respondents mentioned that they took vitamins or supplements every day (Figure 19). The frequency of daily multivitamin or folic acid-containing vitamin intake was higher among females than males. The proportion of respondents who took vitamins/supplements daily was significantly higher among Whites. In addition, older adults took vitamins or supplements more regularly (daily) than younger adults.



**Figure 20**

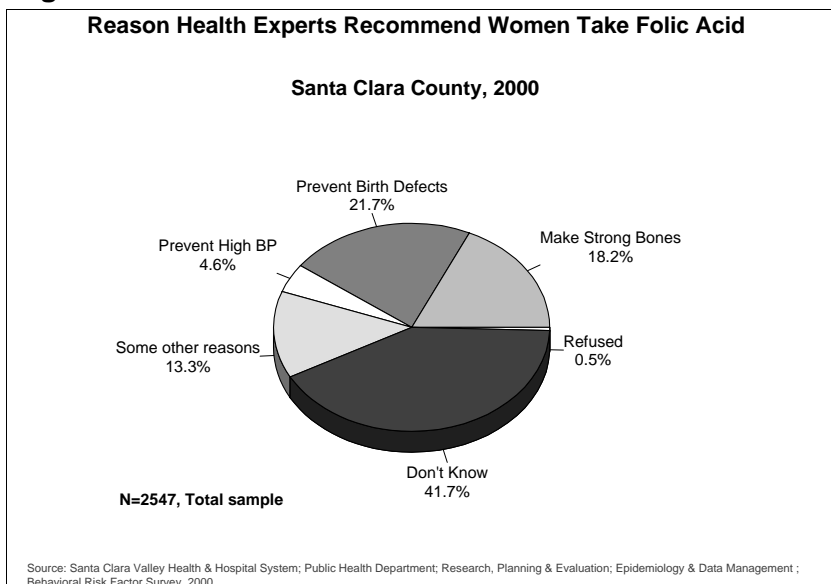


Overall, 50.5% of women age 18 to 44 years reported taking folic acid, either through multivitamins or folic acid pills/vitamins (Figure 20). Folic acid intake was highest among Whites and lowest among Hispanics. Consumption of folic acid also increased as age increased.

## Knowledge of Folic Acid's Benefits

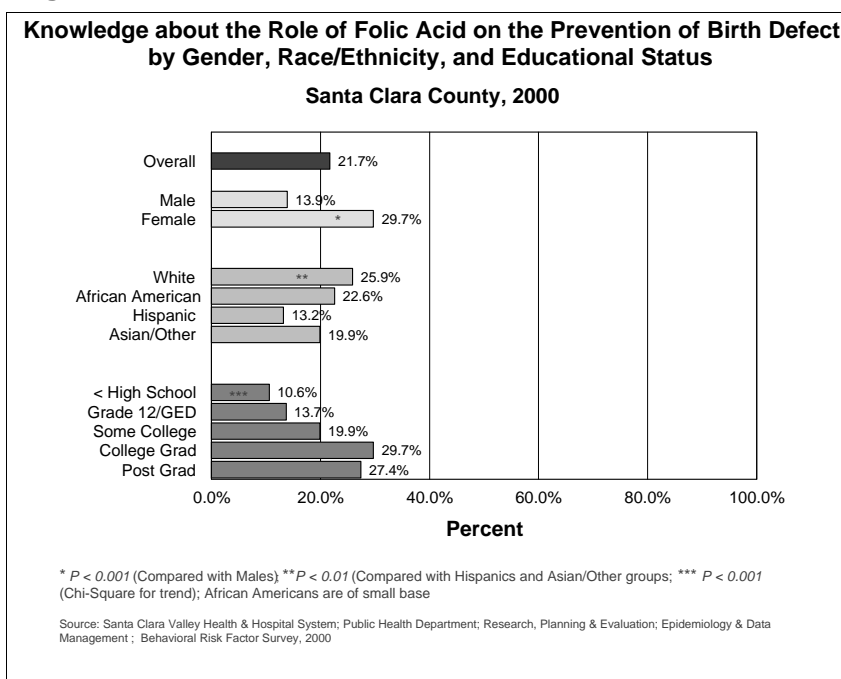
Overall, respondents were not aware of the benefits of folic acid consumption, with 42% reporting that they did not know why experts recommended folic acid intake. Only 21.7% knew that folic acid intake was recommended to prevent birth defects (Figure 21).

**Figure 21**



**Figure 22**

As depicted in Figure 22, twice as many women (30%) than men (14%) knew that folic acid consumption could help prevent birth defects. Similarly, twice as many White respondents (26%) knew about the benefits of folic acid on birth outcomes than Hispanics (13.2%). Furthermore, educational status was strongly associated with knowledge on the benefits of folic acid. The more years of education the respondents had, the more likely they knew of folic acid's role in preventing birth defects.



**Table 9**

**Socio-demographic Predictors for Folic Acid Intake in Women:  
Unadjusted Odds Ratios  
Santa Clara County, 2000**

Variables	Odds Ratio	95% CI
White (White=1, Non-White=0)	<b>2.48</b>	<b>1.96, 3.13</b>
Hispanic (Hispanic=1, Non-Hispanic=0)	<b>0.38</b>	<b>0.29, 0.51</b>
Asian (Asian/other=1, All others=0)	<b>0.74</b>	<b>0.57, 0.97</b>
Health plan (Yes=1, No=0)	<b>3.77</b>	<b>2.36, 6.03</b>
Physical check-up within 1 year (Yes=1, No=0)	1.22	0.96, 1.56
Education (< than college=0, >=College=1)	<b>1.91</b>	<b>1.60, 2.27</b>
Household income (< 50 K=0, >=50 K=1)	<b>1.58</b>	<b>1.33, 1.88</b>
Age ( <40 yr=0, >=40 yr=1)	<b>1.80</b>	<b>1.53, 2.11</b>
Married (Yes=1, No=0)	<b>1.32</b>	<b>1.07, 1.64</b>

Statistically significant 95% CIs are shown in bolds

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

Unadjusted ORs, shown in Table 9, suggest that being White (OR: 2.48; 95% CI: 1.96, 3.13), having a health plan (OR: 3.77; 95% CI: 2.66, 6.03), receiving more years of education (OR: 1.91; 95% CI: 1.60, 2.27), having a higher income (OR: 1.58; 95% CI: 1.33, 1.88), being in an older age group (OR: 1.80; 95% CI: 1.53, 2.11), and being married (OR: 1.32; 95% CI: 1.07, 1.64) were all positively associated with folic acid intake.

Adjusted ORs in logistic regression analysis suggest that being White, being in an older age group, receiving more years of education, and having routine physical checkups remained significantly associated with folic acid intake (Table 10).

**Table 10**

**Socio-demographic Predictors for Taking Folic Acid Supplement:  
Adjusted Odds Ratios  
Santa Clara County, 2000**

Variables	Odds Ratio	95% CI
White (White=1, Non-White=0)	<b>1.75</b>	<b>1.09, 2.82</b>
Age ( <40 yr=0, >=40 yr=1)	<b>1.40</b>	<b>1.16, 1.68</b>
Education (< than college=0, >=College=1)	<b>1.54</b>	<b>1.25, 1.92</b>
Physical check-up within 1 year (Yes=1, No=0)	<b>1.30</b>	<b>1.09, 1.55</b>
Household income (< 50 K=0, >=50 K=1)	1.20	0.98, 1.48

Statistically significant 95% CIs are shown in bolds

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

**Summary of Key Findings for Folic Acid Intake and Awareness**

The data suggest a very low prevalence of folic acid intake (50.5%) among women of childbearing age (18 to 44 years) that is far below the 2010 target of 80%. Further analysis suggests disparities among various ethnic groups, education levels, and income levels. Folic acid intake among Hispanic women was extremely low. Additionally, other important risk factors associated with lack of folic acid intake were being young, having less years of education, being in a lower income level, and not receiving routine physical checkups. The survey results also suggest that a large number of respondents were not aware that folic acid consumption by women of childbearing age helps in preventing specific birth defects.



Unprotected sexual practices may lead to unintended pregnancies and contraction of STDs, including HIV. STDs are preventable, yet their occurrence is common and costly, making them a significant public health problem. According to STD statistics posted by the American Social Health Association (n.d.), one in five people in the United States has an STD, and two-thirds of all STDs occur in people 25 years of age or younger. Moreover, at least one in four Americans will contract an STD at some point in their lives. STDs engender many harmful, often irreversible, and costly clinical complications, such as reproductive health problems, fetal and perinatal health problems, and cancer. In 1997, the Institute of Medicine (as cited by DHHS, 2000) concluded that the direct and indirect costs of the major STDs and their complications, including sexually transmitted HIV infection, are conservatively estimated at \$17 billion annually. There are also observed disparities for the incidence of STDs among gender, age, and race/ethnicity.

The Healthy People 2010 report (DHHS, 2000) notes that practicing responsible sexual behavior to reduce unintended pregnancies and contraction of STDs includes complete abstinence from sexual intercourse, delayed initiation of intercourse, reduced number of sex partners, and increased use of effective physical barriers, such as condoms, or emerging chemical barriers, such as microbicides. Additionally, access to healthcare enables early detection, treatment, and counseling on healthy practices against STDs.

## Healthy People 2010 Goal and Objectives: Sexual Behavior

<b>Goal: Promote responsible sexual behaviors, strengthen community capacity, and increase access to quality services to prevent sexually transmitted diseases (STDs) and their complications</b>		
<b>Objectives</b>		<b>Target</b>
1-3g	Increase the proportion of persons appropriately counseled about prevention of sexually transmitted diseases (males age 15 to 49 years; females age 15 to 44 years)	Developmental
13-2	Reduce the number of new AIDS cases among adolescent and adult men who have sex with men	13,385 new cases nationally
13-3	Reduce the number of new AIDS cases among females and males who inject drugs	9,075 cases nationally
13-4	Reduce the number of new AIDS cases among adolescent and adult men who have sex with men and inject drugs	1,592 cases nationally
13-5	Reduce the number of cases of HIV infection among adolescents and adults	Developmental
13-6	Increase the proportion of sexually active persons who use condoms	
a	Females aged 18 to 44 years	50%
b	Males aged 18 to 49 years	Developmental
25-1b	Females aged 15 to 24 years attending STD clinics	3%
25-1c	Males aged 15 to 24 years attending STD clinics	3%
25-8	Reduce HIV infections in adolescent and young adult females aged 13 to 24 years that are associated with heterosexual contact	Developmental
25-11	Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active	95%
25-15	Increase the proportion of all local health departments that have contracts with managed care providers for the treatment of nonplan partners of patients with bacterial sexually transmitted diseases (gonorrhea, syphilis, and chlamydia	Developmental

### Data Analysis of BRFs Responses for Sexual Behavior

Questions on Sexual Behavior were asked of all adults under the age of 50 years during the BRFs interviews.

**Table 1**

#### Number of Sexual Partners During Past 12 Months Among Adults Younger Than 50 Years Santa Clara County, 2000

**N = 1544**

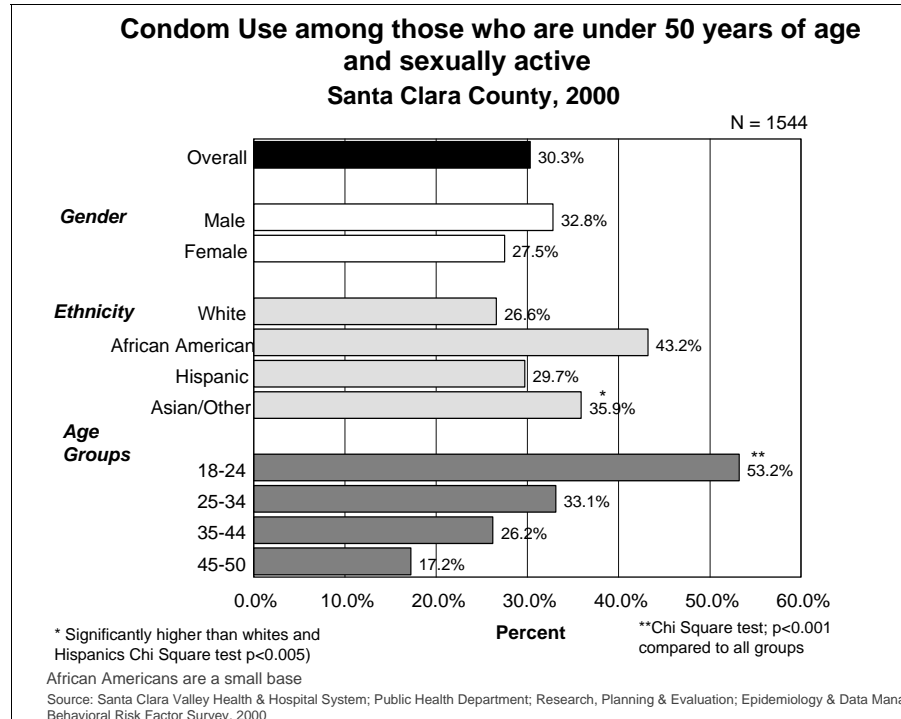
Number of Sexual Partners in the Past 12 Months	Overall	Male	Female	White	Hispanic	Asian/Other
None	12.8%	13.9%	11.5%	10.9%	8.8%	19.4%
One	72.1%	66.7%	78.1%	76%	71.8%	65.1%
2-3	6.2%	7.7%	4.5%	6.2%	9.4%	2.7%
4-5	1.6%	2.3%	1.0%	1.5%	2.7%	1.0%
6-10	0.7%	1.0%	0.3%	0.6%	1.4%	0.2%
11 or more	0.7%	1.4%	0.2%	0.7%	1.4%	0.0%
Don't Know/Refused	6.0%	7.2%	4.5%	4.1%	4.6%	11.6%
Mean	1.2	1.4	1	1.3	1.5	0.9
Median	1	1	1	1	1	1

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

Table 1 illustrates that 66.7% of males had only one partner and about 7.7% had between 2 to 3 sexual partners in the last 12 months. About 78.1% of females had only one partner and 4.5% had between 2 to 3 sexual partners in the last 12 months. Asian/others had a significantly lower average number of sexual partners (0.9) in the last 12 months as compared to Whites (1.3) and Hispanics (1.5).

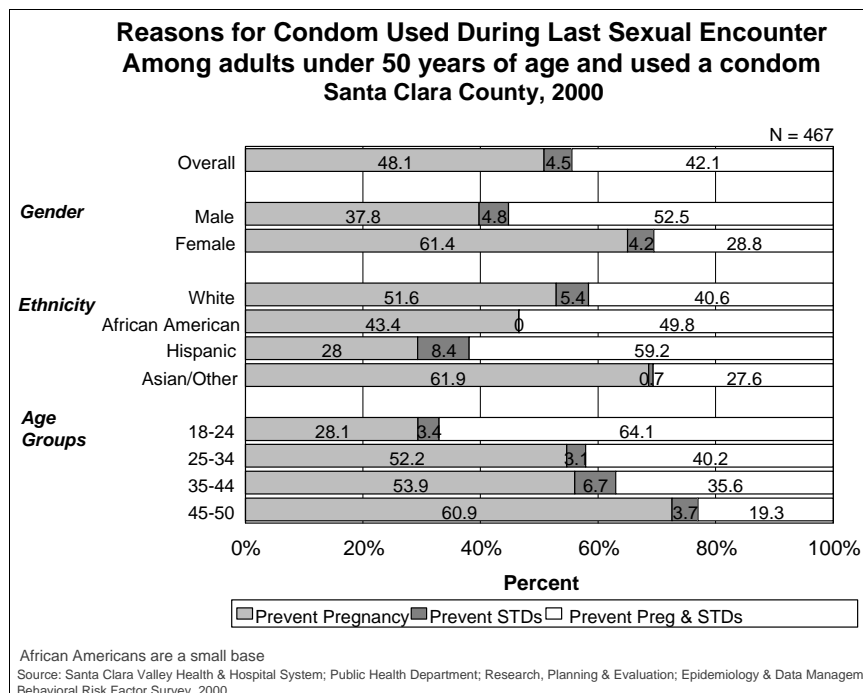
**Figure 1**

Approximately 64.2% of respondents under age 50 and still sexually active did not use condoms the last time they had sexual intercourse (Figure 1). A significantly greater proportion (53.2%) of younger adults (18 to 24 years) reported using a condom. A higher proportion of Asian/others (35.9%) reported using a condom compared to Whites and Hispanics.



**Figure 2**

68.4% of Hispanics reported not using a condom during their last sexual encounter as opposed to 50.8% of Asian/others. Males reported that their most common reason for using a condom was to prevent pregnancy and STDs. Females reported that their main reason was to prevent pregnancy (figure 2).



Overall, 51% of sexually active adults under the age of 50 years believed that condoms were effective in preventing the sexual transmission of HIV (Figure 3). About 38% of respondents thought condoms were somewhat effective, while 5.4% thought condoms were either not effective or were not sure of their effectiveness. In general, more male and White respondents believed condoms to be very effective, while respondents age 18 to 24 and 45 to 54 years considered condoms to be ineffective (data not shown). Approximately 7.3% of Asian/others reported that they were not aware of condom use or its effectiveness (data not shown).

**Figure 3**

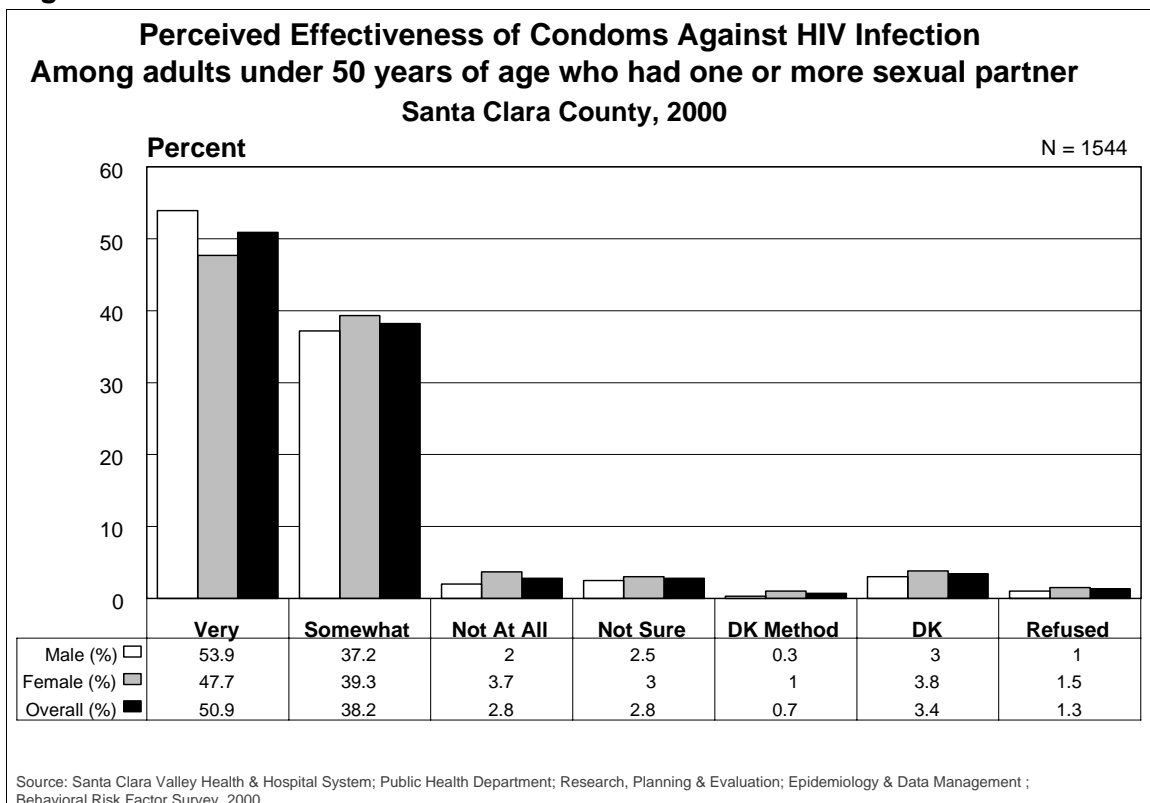


Table 2

**Number of "New" Sexual Partners During Past 12 Months in percents  
among adults under 50 years of age  
Santa Clara County, 2000**

N = 1544

Number of "new" Sexual Partners	Overall	Male	Female	White	Hispanic	Asian/Other
None	71.0%	65.6%	76.8% *	74.3% *	67.1%	67.1%
One	16.7%	18.5%	14.7%	14.9%	19.0%	18.1%
2-3	5.0%	7.3% *	2.6%	4.8%	7.3% *	3.0%
4-5	1.3%	1.5%	1.0%	1.0%	2.7%	0.4%
6-10	0.3%	0.6%	0.0%	0.6%	0.1%	0.0%
11 or more	0.3%	0.8%	0.0%	0.2%	0.7%	0.0%
DK/Refused	5.3%	5.8%	4.6%	4.1%	2.6%	11.4% *
Mean	0.5	0.7	0.3	0.5	0.7	0.3

\*P<0.01 (Proportions were significantly higher than comparison groups, i.e. between genders or between ethnic groups)  
Numbers among African Americans were too low for the comparison

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

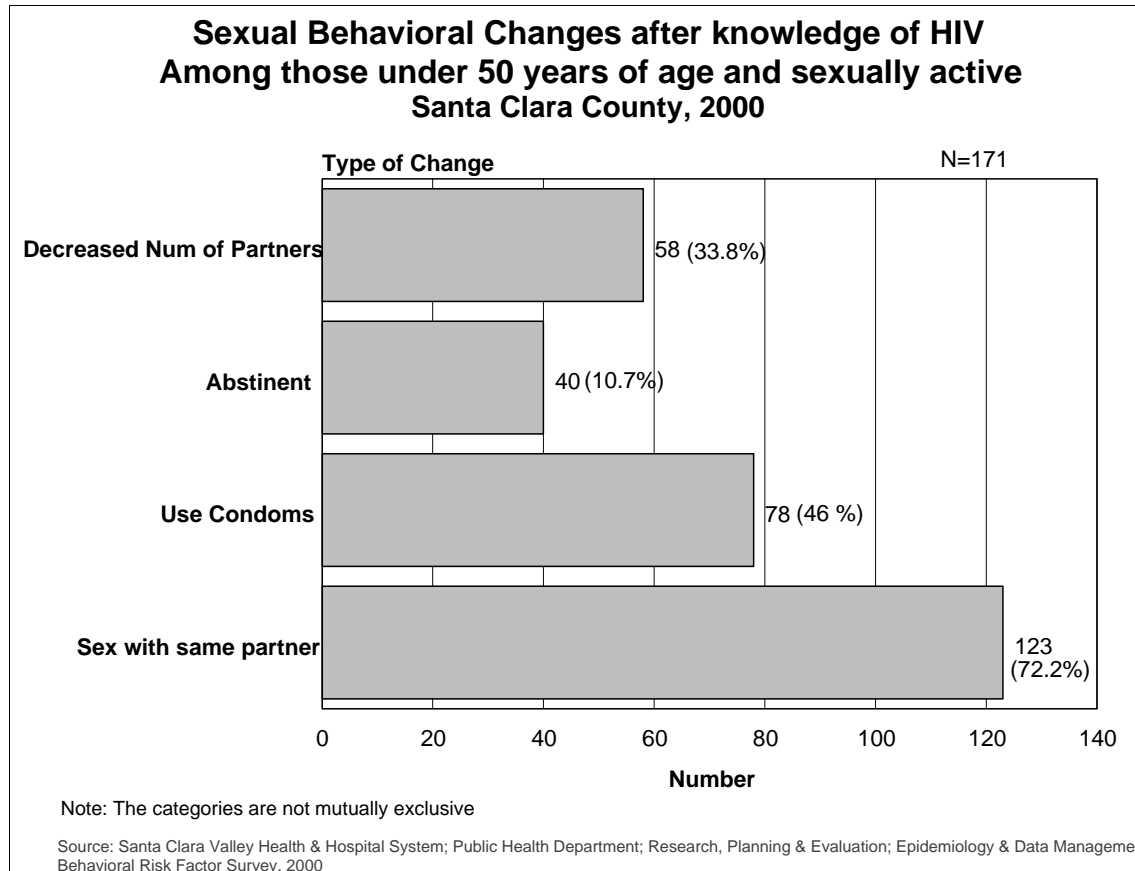
The average number of "new" sexual partners in the last 12 months was higher among male respondents (0.7) and among those between 18 and 24 years old (1.0) (Table 2). A significantly higher percentage (11.7%) of Asian/others refused to respond or reported that they did not know the number of their new sexual partners.

High-risk factors that can lead to the contraction of HIV include already having an STD, having anal sex without condoms, having tested positive for HIV, and using intravenous drugs. Considering these factors, 5.1% of respondents were at risk for HIV infection because they reported one or more high-risk behaviors listed. The proportion was higher among younger age groups: 10.4% among 18 to 24 year olds and 5.9% among 25 to 34 year olds (data not graphed). Higher proportions of Whites and Hispanics reported practicing high-risk behaviors for contracting HIV (5.3% and 7.5% respectively) than Asian/others, who mainly reported that they were not aware whether they practiced high-risk behaviors or not (data not shown).

Among those who were at risk for a HIV infection because of their high-risk behavioral practices, 70% did not use a condom during their last sexual encounter. Furthermore, about 18% were treated for a sexually transmitted disease. Perception of condom effectiveness was not significantly different among respondents, regardless of perceived risk for contracting HIV (data not shown).

Approximately 2.8% of respondents reported being treated for a sexually transmitted or venereal disease during the past one year. The number of responses were too small to do any further analysis across gender, ethnicity, and age groups (data not shown).

**Figure 4**



Approximately 11.1 % (N=171) of all adults under 50 years old who were sexually active reported that they changed their sexual behavior in the past 12 months due to what they knew about the HIV virus and prevention of its transmission. Ranging from highest to lowest prevalence, behavioral changes included having sexual intercourse with the same partner, using condoms for protection, decreasing the number of sexual partners, and becoming abstinent (Figure 4).

Among those who perceived themselves at some risk for HIV infection (N=643), about 13.5% made some changes in their sexual behavior after obtaining knowledge of HIV transmission (Figure 5). The levels of behavioral changes were the same as those in the general population. Refer to the section on HIV/AIDS for more details. Table 3 summarizes the prevalence of high-risk sexual behaviors.

**Figure 5**

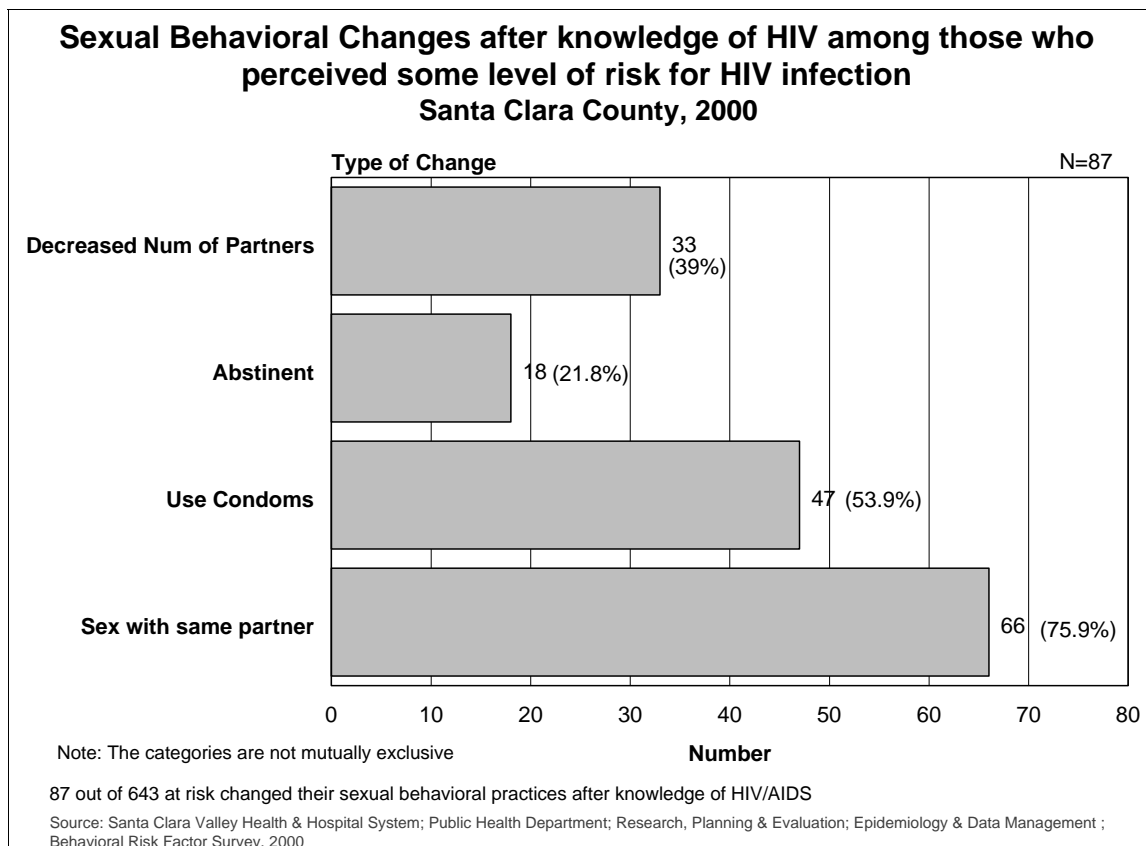


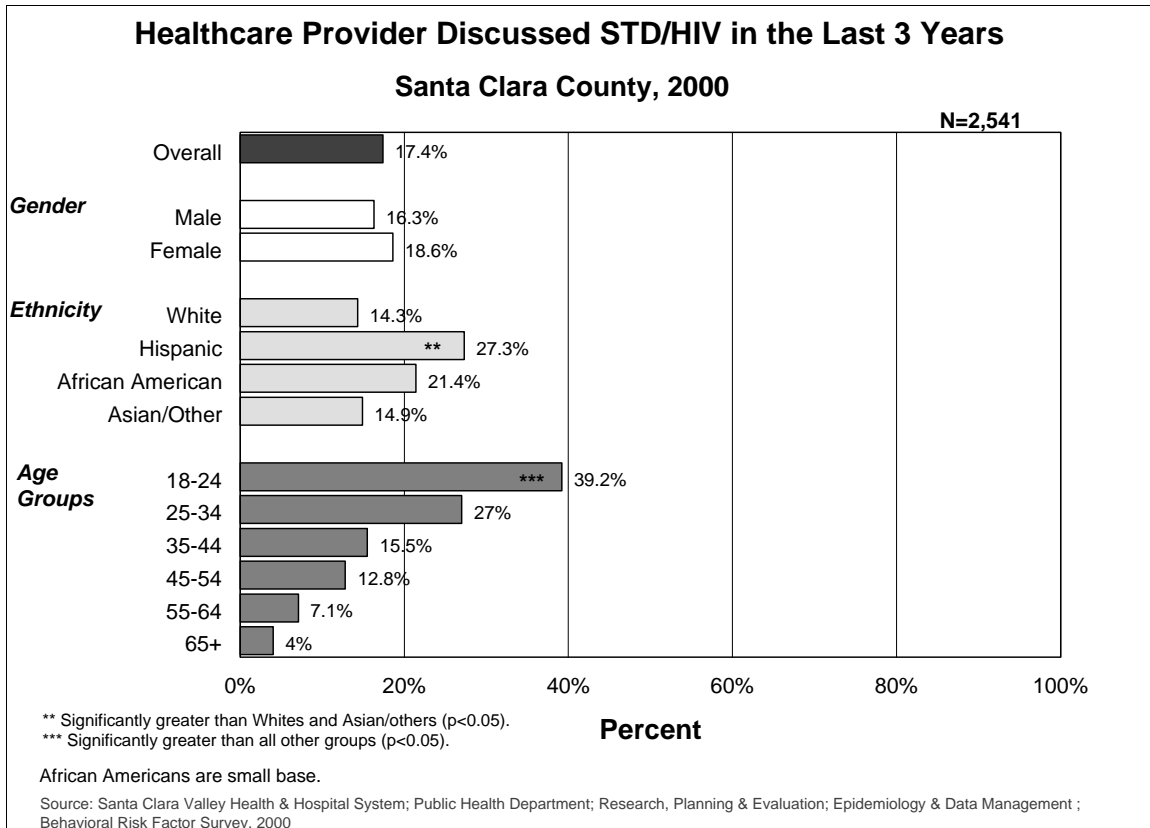


Table 3

## Summary of Responses for Sexual Behavior and HIV/AIDS

Behavior Type	Number	Percent
4 or more sexual partners in the past 12 months	52	2.9%
More than 4 “new” sexual partners in the past 12 months	30	1.9%
No condom use among those who had more than one partner in the past 12 months	45	27.8%
No knowledge or belief of “condom being very effective against HIV infection” among those who had more than one partner in the past 12 months	48	29.6%
No condom use among those who had more than one “new” partner in the past 12 months	19	17.4%
No knowledge or belief of “condom being very effective against HIV infection” among those who had more than one “new” partner in the past 12 months	33	30.3%
At risk for HIV due to risky behaviors	78	5.1%
At risk for HIV due to risky behaviors and no condom use	55	70.1%
At risk for HIV due to risky behaviors and did not change sexual behavior in the past 12 months due to knowledge	61	77.5%
Self reported risk for HIV infection	643	29.0%
Self reported risk for HIV infection and no condom use	310	48.2%
Self reported risk for HIV infection and did not change sexual behavior in the past 12 months due to knowledge	439	68.0%
Perceived increased risk for HIV infection	72	3.3%
Perceived increased risk for HIV infection among those who did not use condoms	30	42.0%
Perceived increased risk for HIV infection among those who did not change sexual behavior in the past 12	35	48.6%

**Figure 6**



Due to the importance of HIV and STD prevention education, respondents were asked if their healthcare providers discussed these issues with them. Overall, 17.4% reported having a discussion with their healthcare provider about HIV/STDs. More females, Hispanics, and respondents between 18 and 24 years reported receiving such education than their respective counterparts.

### Summary of Key Findings for Sexual Behavior

High-risk sexual behaviors and characteristics that increase contraction of HIV and other STDs are having multiple sexual partners, having 4 or more “new” sexual partners in a given year, not using condoms when a person has more than one sexual partner in a given year, and believing that condoms are ineffective against HIV infection. Overall, 72% of respondents age 50 years and younger reported having only one partner in the past 12 months, and 9.2% reported having more than 2 partners. Moreover, 7% reported having 2 or more “new” partners within the past 12 months.

Although 90% of sexually active adults believed condoms to be either very or somewhat effective against HIV transmission, over 64% reported not using a condom during their most recent sexual encounter, particularly among Hispanic and older age groups (25 to 50 years). Of those who used a condom during their most recent sexual encounter, the most common reason was to prevent pregnancy.

Overall, 11.1% of respondents altered their sexual behavior after learning about HIV and preventing its transmission. Among those who were at risk for HIV infection, 68% did not change their sexual practices. Additionally, among those who perceived themselves to be at *increased* risk for HIV infection, 42% did not use a condom and 48% did not change other sexual practices after learning about preventing HIV transmission.

In comparison to BRFS 1997 results, significantly fewer survey participants reported not knowing about the effectiveness of condom use against HIV infection in 2000. Despite this increase in knowledge about condom use among BRFS 2000 participants, fewer individuals reported to have changed their sexual behavior after learning of HIV transmission in 2000 than in 1997. A comparison of 1997 and 2000 BRFS results are available in Appendix A.

Analysis in this section is cross-referenced with the HIV/AIDS section that follows this section of the report.

HIV (human immunodeficiency virus), the virus that causes AIDS (acquired immunodeficiency syndrome), infects and takes over certain cells of the immune system that are important in fighting disease. Transmission of HIV can occur in three ways: sexual transmission, exchange of bodily fluids or blood products (i.e. needle sharing or contaminated blood transfusions), or by transmission from mother to baby during pregnancy or birth.

In 1998, the CDC's HIV/AIDS Surveillance Report (as cited by DHHS, 2000) affirmed that HIV/AIDS has been reported in every racial and ethnic population, every age group, every socioeconomic group in every state and most large cities in the U.S since AIDS was identified in 1981. Currently, HIV/AIDS remains a significant cause of illness, disability, and death, despite declines in 1996 and 1997. Surveillance trends reported to the CDC Division of HIV/AIDS Prevention through June 2001 show that national cumulative AIDS cases are 793,026, of which 784,032 are adults and adolescents; 649,186 cases are males and 134,845 cases are females. The total cumulative number of reported deaths as a result of AIDS was 457,667. These deaths are due to one or more opportunistic infections caused by bacterial, fungal, and viral infections or certain types of cancer that take advantage of a victim's weakened immune system engendered by the HIV infection.

The Healthy People 2010 (DHHS, 2000) report writes that the HIV/AIDS epidemics not only vary by region and community but also by population, risk behavior, and geography. The CDC ranks national cumulative cases of persons with AIDS by race/ethnicity from greatest to least as Whites (337,035), Blacks (301,784), Hispanics (145,220), Asian/Pacific Islanders (5,922), American Indians/Alaska Natives (2,433), and race/ethnicity unknown (632). Recently introduced therapies for HIV/AIDS, such as the use of protease inhibitors, have reduced illness, disability, and death due to HIV/AIDS; however, the Healthy People 2010 report adds that access to culturally and linguistically appropriate testing and care may limit progress in this area.

Interventions to prevent HIV infection focus on promoting HIV testing; providing messages against needle-sharing; and educating on safer sexual behavior, such as using condoms consistently and correctly, use of intravaginal microbicides, reducing the number of sex partners, and knowing serostatus of one's partner. Moreover, detection and treatment of other STDs are also important since STDs are known to biologically enhance the transmission for HIV during sexual contact for both men and women. Depending on the co-infection of the STD involved, HIV transmission can be increased in a range from threefold to fifty fold, according to St. Louis, Wasserheit et al (1997). Hence HIV/AIDS prevention and intervention programs should include both behavioral and biomedical strategies.

## Healthy People 2010 Goal and Objectives: HIV/AIDS

Goal: Prevent human immunodeficiency virus (HIV) infection and its related illness and death		
Objectives		Target
13-6	Increase the proportion of sexually active persons who use condoms	
a	Females age 18 to 44 years	50%
b	Males age 18 to 49 years	Developmental
13-8	Increase the proportion of substance abuse treatment facilities that offer HIV/AIDS education, counseling, and support	70%
7-2	Increase the proportion of middle, junior high, and senior high schools that provide school health education to prevent health problems in the following areas: unintentional injury; violence; suicide; tobacco use and addiction; alcohol and other drug use; unintended pregnancy, HIV/AIDS, and STD infection; unhealthy dietary patterns; inadequate physical activity; and environmental health	90% (Unintended pregnancy, HIV/AIDS, and STD infection)
1-3g	Increase the proportion of persons appropriately counseled about health behaviors: Prevention of sexually transmitted diseases (males age 15 to 49 years; females age 15 to 44 years)	Developmental
a	Females (condom use)	75%
b	Males (condom use)	83%

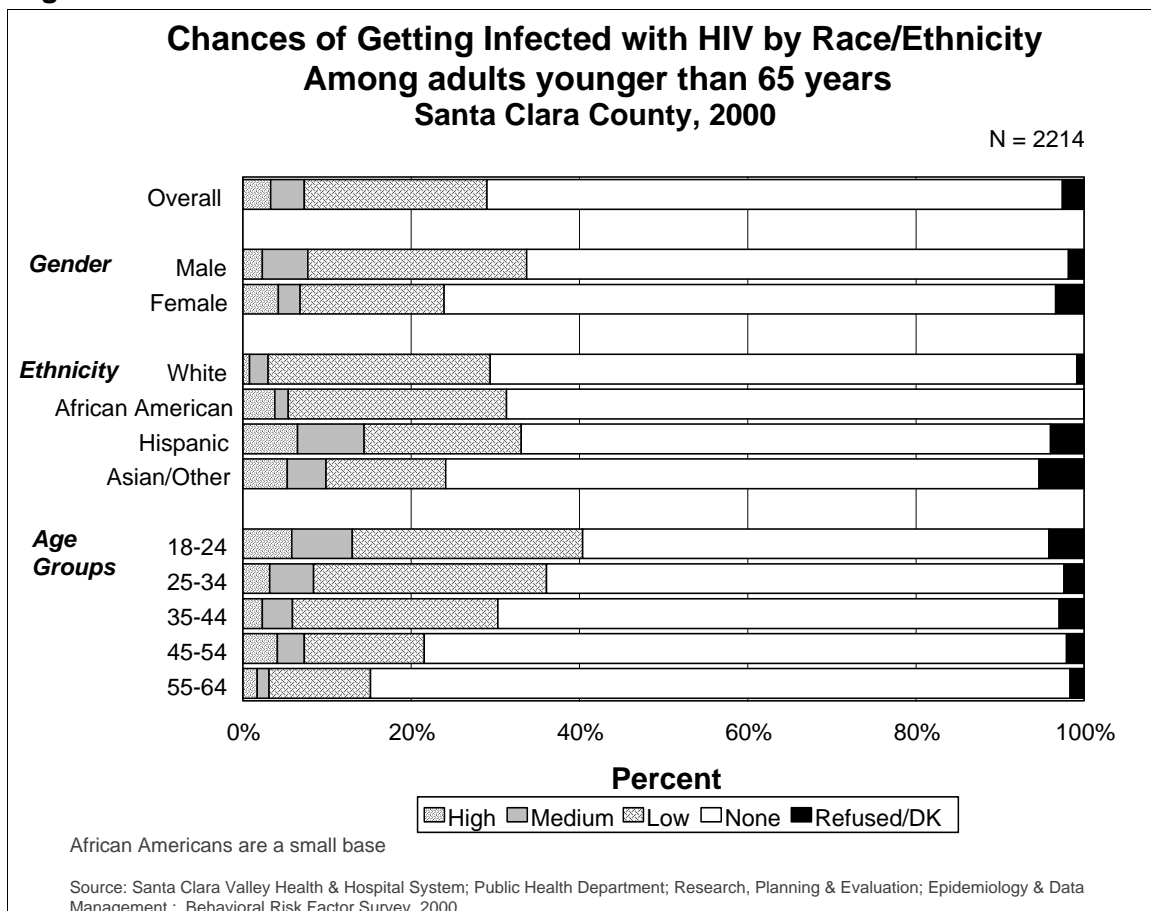
## Data Analysis of BRFSS Responses for HIV/AIDS

Education on preventive practices against HIV infection is an important method of intervention. About, 47% of respondents, particularly females, Whites, Hispanics, and those 18 to 24 years old, believed that children should start receiving HIV/AIDS education in school during Grades 4 to 6. Approximately 11% of respondents felt that education should begin around grades 9 to 10. Socioeconomic factors, such as the level of education and income, did not affect the answers (data not shown).

About 90% of the respondents reported that they would encourage their children, if sexually active, to use condoms. This proportion was significantly lower among Asian/others (80%). Approximately 10% did not know if they would encourage their children to use condoms (data not graphed).

Among all respondents under the age of 65 years, 29% perceived themselves to be at some level of risk for HIV infection due to behavioral practices (High: 3.3%, Medium: 4%, and Low: 21.7%), as delineated in Figure 1. California's BRFSS statistics were slightly different, with 6.5% of state respondents perceiving themselves to be at high risk, 5.3% at medium risk, and 21.7% at low risk. Among SCC BRFSS respondents, a higher proportion of males (5.4%) perceived themselves to be at medium-level risk than females (2.6%).

**Figure 1**



Among respondents who perceived themselves at some level of risk for HIV transmission, 60% were males, 39% were never married, and the average age was 36 years. Furthermore, 50% of Whites, 25% of Hispanics, 20% of Asian/others, and 4% of African Americans believed that they were at risk for contracting HIV.

**Figure 2**

Figure 2 shows that 18% of respondents who perceived themselves to be at risk for HIV infection changed their sexual behavior in the past 12 months compared to 8.6% of those who did not perceive themselves to be at risk. Additionally, the higher the perception of risk, the more likely respondents had changed their sexual behavior (Chi Square for trend;  $p < 0.001$ ).

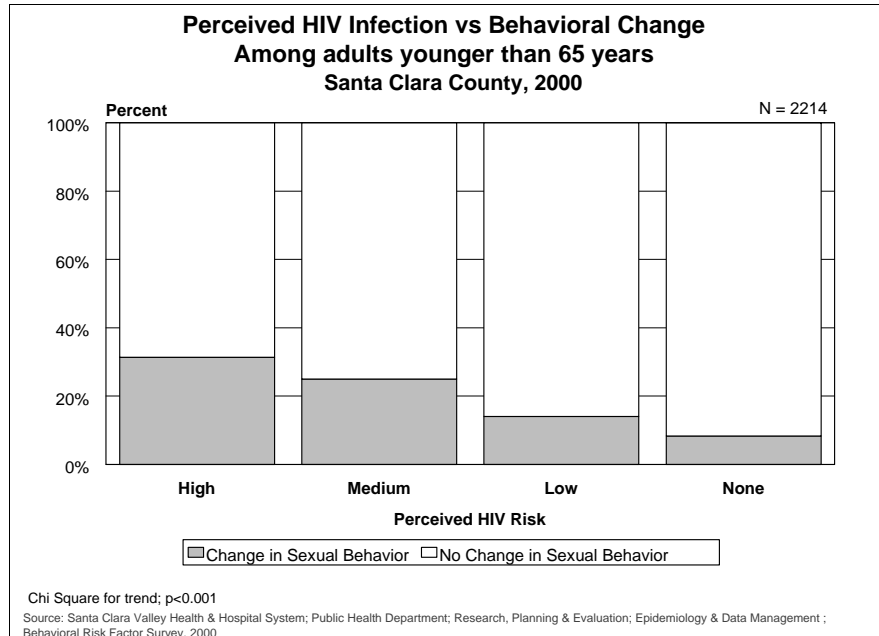
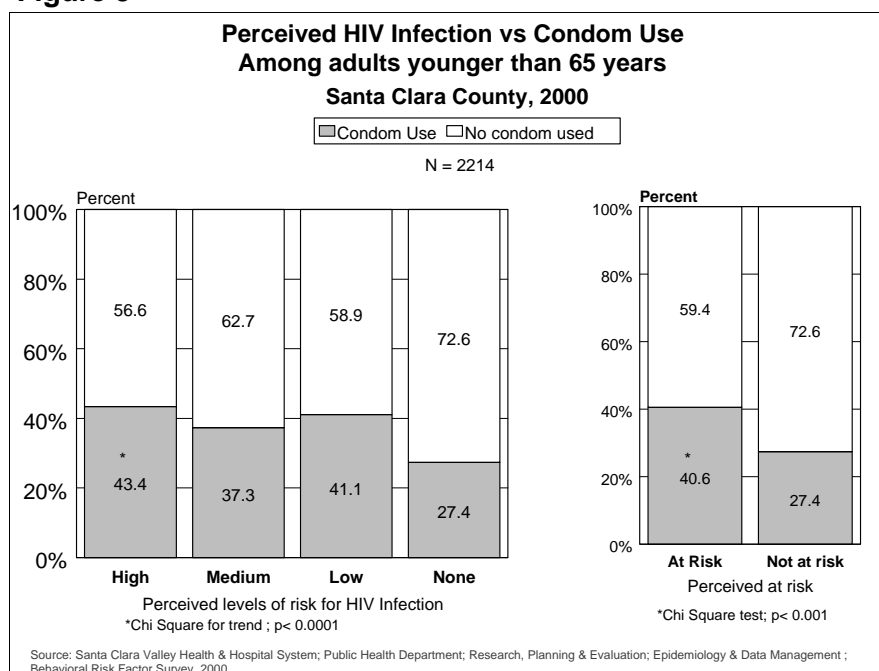
**Figure 3**

Figure 2

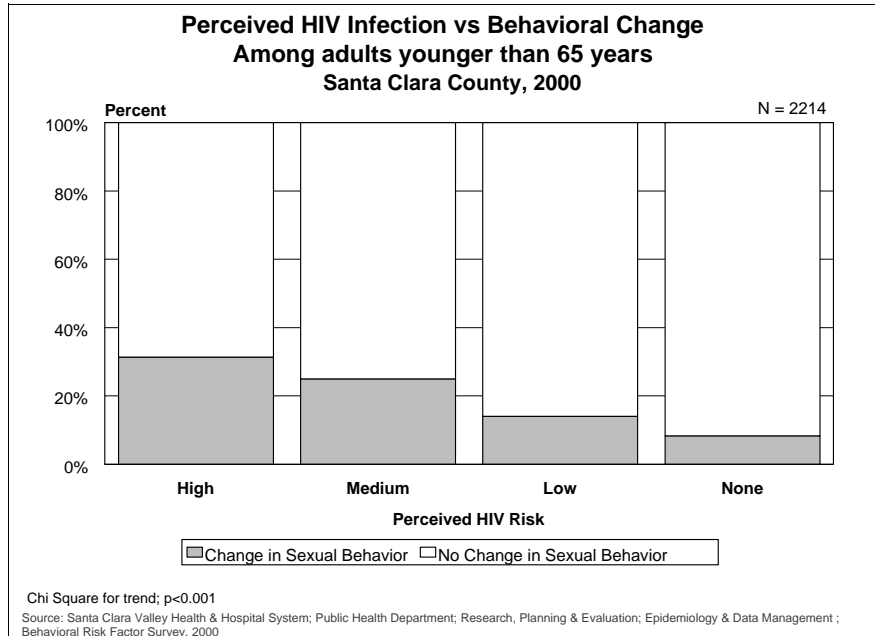
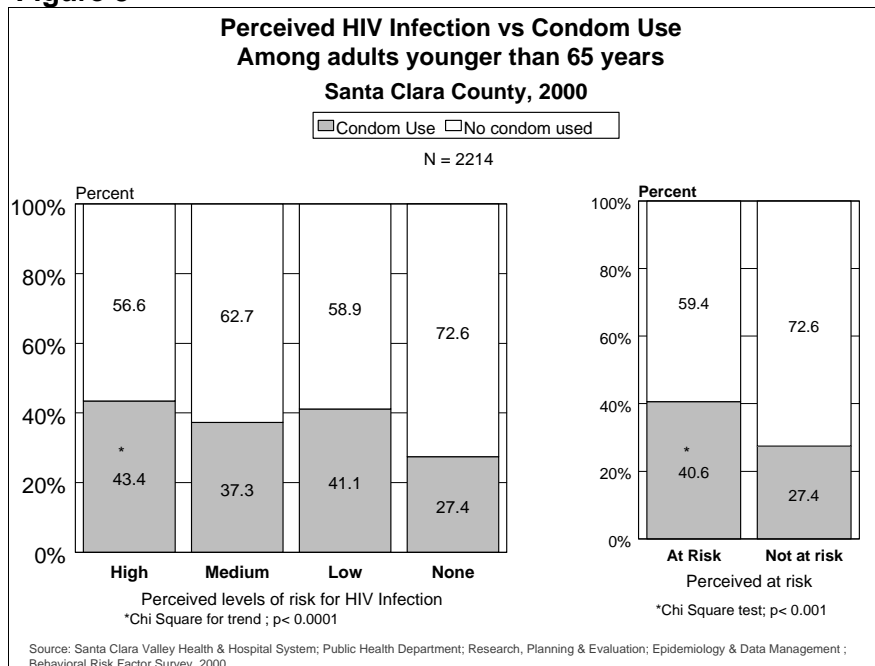


Figure 2 shows that 18% of respondents who perceived themselves to be at risk for HIV infection changed their sexual behavior in the past 12 months compared to 8.6% of those who did not perceive themselves to be at risk. Additionally, the higher the perception of risk, the more likely respondents had changed their sexual behavior (Chi Square for trend;  $p < 0.001$ ).

Figure 3



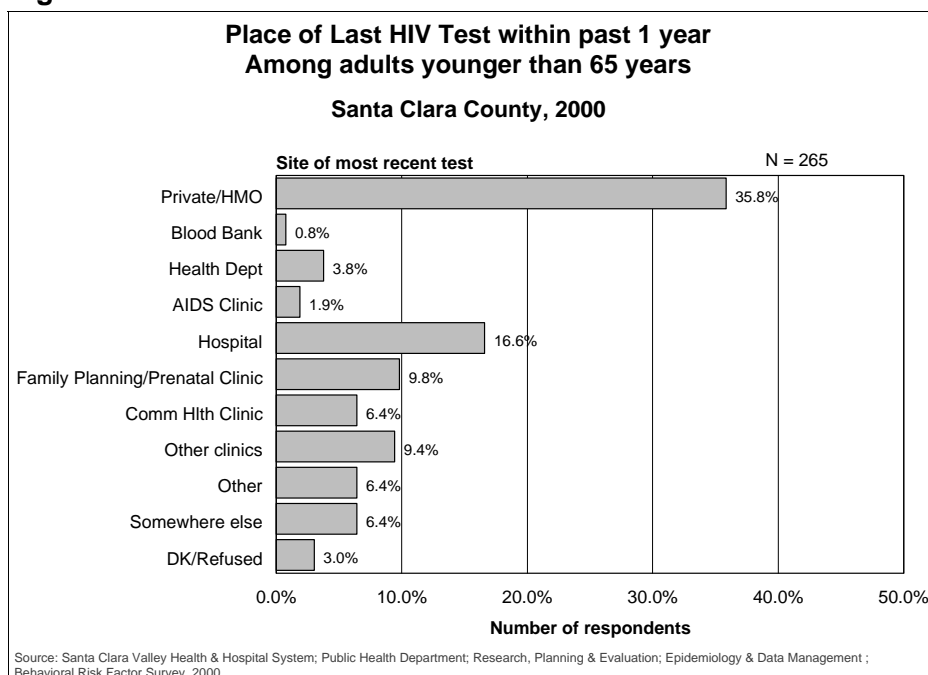


Over 90% of respondents reported that condoms were very or somewhat effective. There were no differences in perception of condom effectiveness among those who perceived themselves to be at risk for HIV infection and those who did not. Regardless of the high proportion of respondents who believed condoms to be effective against HIV transmission, 60% of respondents with some level of perceived risk and 73% of those with no perceived risk did not use a condom during their last sexual encounter. However, respondents who believed their sexual practices placed them at risk for HIV infection (Figure 1) were 1.8 times more likely to have used a condom the last time they had sexual intercourse than those who were not at risk (see Figure 2 in the Sexual Behavior section) (Chi square test,  $p < 0.001$ ). The lower the perception of risk, the lower the use of condoms at the last sexual encounter (Chi Square for trend,  $p < 0.001$ ). A summary of responses is also provided in Table 3 at the end of the section on Sexual Behavior.

Not including routine tests as part of the process for donating blood, nearly 50% of the respondents tested for HIV. Approximately 25% of these respondents, with higher representation among Hispanics and younger adults (18 to 24 years old), received the test in the past 12 months (data not graphed).

Among female respondents, the most common reasons for screening for HIV were “pregnancy” and “routine checkup,” regardless of whether a woman was pregnant or not at the time of the survey. Among male respondents, the main reasons to undergo HIV testing were for a “routine checkup” or “just to find out”. Although the main reason among Whites was for “routine checkup,” the main reasons for African Americans were for “pregnancy”, “regular checkup” and “other”. The main reason for Asian/others was “pregnancy,” whereas reasons among Hispanics included “to find out”, “pregnancy” and “routine checkup” (data not shown).

**Figure 4**



Among adults 65 years and younger who received an HIV test in the past 12 months, more than 50% were tested at a private doctor/HMO or hospital/ER/outpatient clinic (refer to Figure 4). Only about 20% received their tests either at a community/family planning/AIDS clinic or the Health Department. Although more men received an at home nurse visit test for HIV, overall, the site at which individuals received their tests did not differ among genders. Asian/others were more likely to receive HIV testing at a “community clinic” or “somewhere else” than other ethnic groups.

Over 90% of adults age 65 years and younger who had a test in the past 12 months received results of their last test. Of all the adults who received their test results, 62% did not receive counseling from a healthcare professional after receiving the HIV test results. This proportion was higher among men (69%) than women (54%) (Data not shown).

### Summary of Key Findings for HIV/AIDS

Approximately 11% of respondents believed that children should start receiving education about HIV/AIDS in school around grades 9 to 10, while 47% believed education should start even earlier, such as between grades 4 to 6. Moreover, 90% reported that they would encourage their children, if sexually active, to use condoms.

Overall, 30% of respondents perceived themselves to be at some level of risk (high, medium, or low) of contracting HIV. Of these respondents, 18% reported that they changed their sexual behavior in the past 12 months, including the use of condoms. In fact, those who believed they were at risk for HIV infection were more likely to have used a condom during their last sexual encounter than respondents with no perceived risk.

HIV testing is another form of intervention encouraged by health providers. Nearly half of the survey respondents reported ever being screened for HIV, with 25% receiving the test in the past 12 months. Reasons for getting tested for HIV included pregnancy, routine checkup, and “just to find out”.

In comparison to BRFS 1997 results, a significantly lower proportion of respondents felt that their chance for HIV infection was low in the BRFS 2000. Reasons for getting tested for HIV were similar for both years. However, more respondents reported getting tested “to apply for a marriage license” and “routine checkup” in 2000, whereas more respondents reported “just to find out” and “blood donation” in 1997. A comparison of 1997 and 2000 BRFS results are available in Appendix A.

Answers to some questions in this section were compared and analyzed with questions asked in the Sexual Behavior module and vice versa. Although respondents were questioned about their knowledge, attitudes, and behaviors about HIV/AIDS, these measures were not directly comparable to objectives mentioned in the Healthy People 2010 report.

## alcohol use

Alcohol abuse is described as a maladaptive pattern of alcohol use that leads to clinically significant impairment or distress (DHHS, 2000). Such distress is manifested by one or more of the following occurring within a 12-month period: recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home; recurrent alcohol use in physically hazardous situations; recurrent alcohol-related legal problems; continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol.

In addition to illicit drug use, alcohol use is associated with many serious problems such as violence (sexual assault, intimate partner abuse, homicide), injury (motor vehicle crashes), and contraction of sexually transmitted diseases, including HIV infection. Substance abuse can also result in disruptions in family, work, and personal life.

According to the Healthy People 2010 report (DHHS, 2000), alcohol abuse alone is associated with motor vehicle crashes, homicides, suicides, and drowning, which are also leading causes of death among youth. Long-term heavy drinking can lead to heart disease, high blood pressure, stroke, cancer, alcohol-related liver disease (i.e. cirrhosis), and pancreatitis. Cirrhosis, one of the 10 leading causes of death in the U.S., is also associated with heavy alcohol consumption over a long period of time. Alcohol use during pregnancy is known to cause fetal alcohol syndrome, a leading cause of preventable mental retardation. These negative consequences of alcohol abuse may lead to escalation of healthcare costs. For example, Harwood et al (1998, as cited by DHHS, 2000) estimated national, annual costs from alcohol abuse to be \$167 billion in 1995.

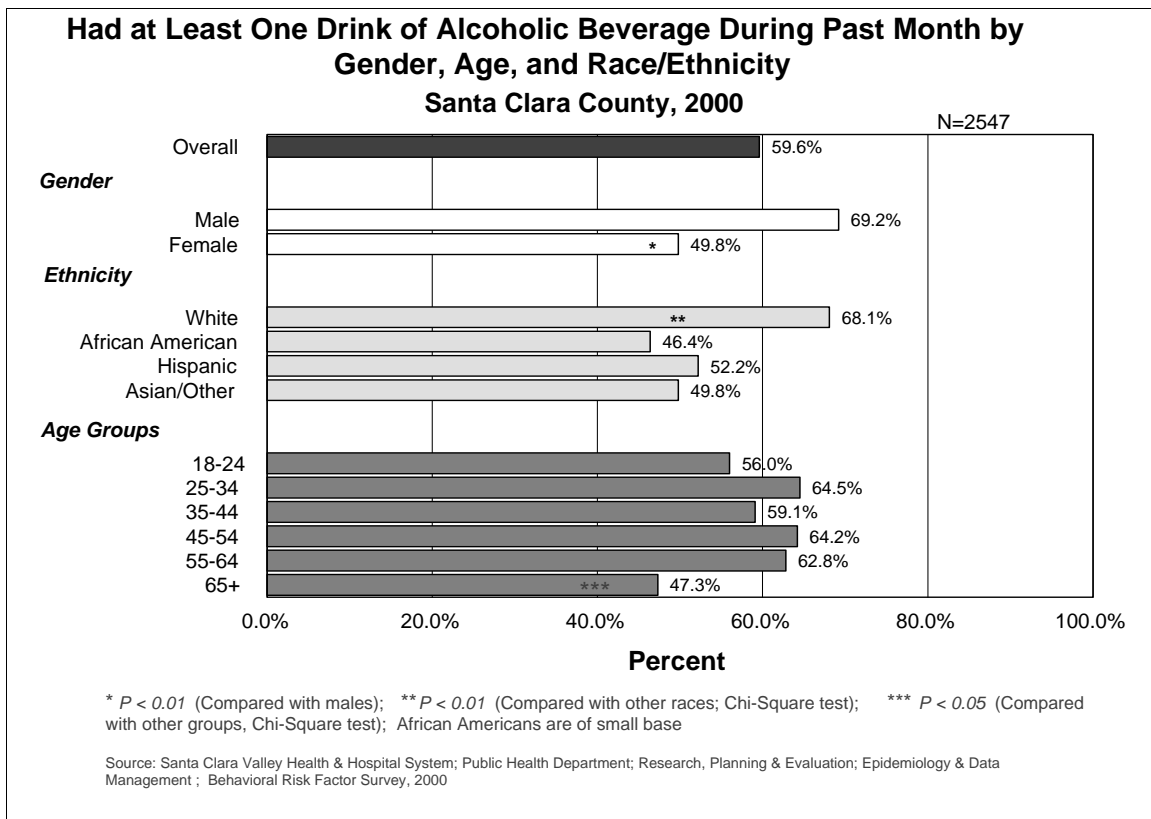
## Healthy People 2010 Goal and Objectives: Alcohol Use

Goal: Reduce substance abuse to protect the health, safety, and quality of life for all, especially children		
Objectives		Target
1-3d	Increase the proportion of persons appropriately counseled about reduced alcohol consumption (adults age 18 years and older with excessive alcohol consumption)	Developmental
26-1	Reduce deaths and injuries caused by alcohol- and drug-related motor vehicle crashes	
a	Alcohol-related deaths	4%
b	Alcohol-related injuries	65%
26-5	Reduce alcohol-related hospital emergency department visits	Developmental
26-11	Reduce the proportion of persons engaging in binge drinking of alcoholic beverages	
b	College students	20%
c	Adults age 18 years and older	6%
26-12	Reduce average annual alcohol consumption	2 gallons per person
26-13	Reduce the proportion of adults who exceed guidelines for low-risk drinking (males and females)	50%

# Data Analysis of BRFSS Responses for Alcohol Use

## Alcohol Consumption

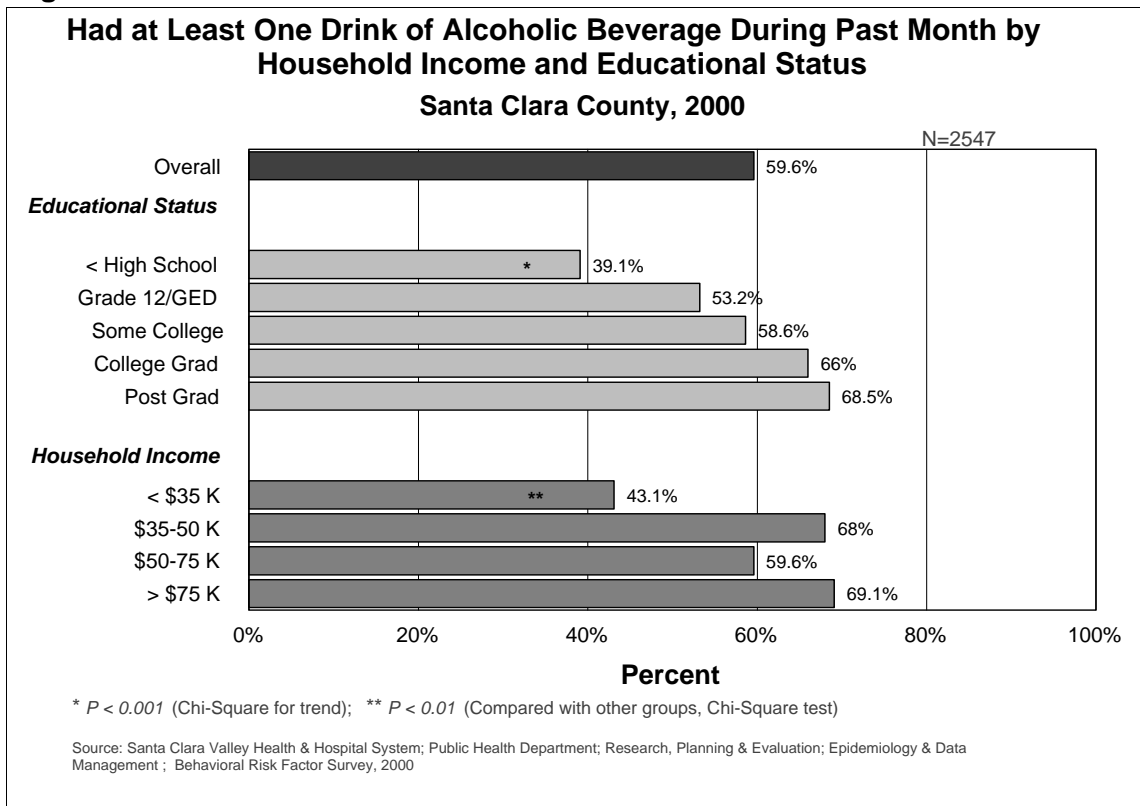
Figure 1



The overall prevalence of drinking any kind of alcoholic beverage was 59.6% (95% CI: 57.7%, 61.5%), as depicted in Figure 1. Males reported drinking alcoholic beverages at a significantly higher rate than females (69% vs. 50%). In addition, reports of drinking alcohol were significantly higher among Whites when compared with Hispanics and Asian/others. Drinking did not differ significantly across age categories, except in the 65 years and over group, in which the proportion of drinkers were significantly lower than any other age groups.

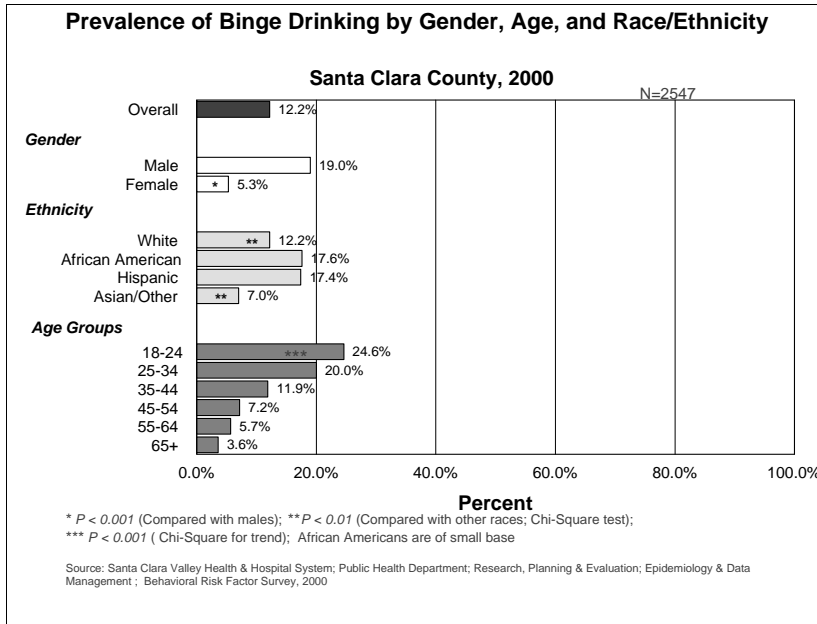
Figure 2 shows that individuals with higher levels of education were more inclined to drink alcohol. In fact, the prevalence of drinking increased as the level of education increased. Furthermore, respondents with a household income lower than \$35,000 drank alcohol significantly less than other income categories.

**Figure 2**



## Binge Drinking

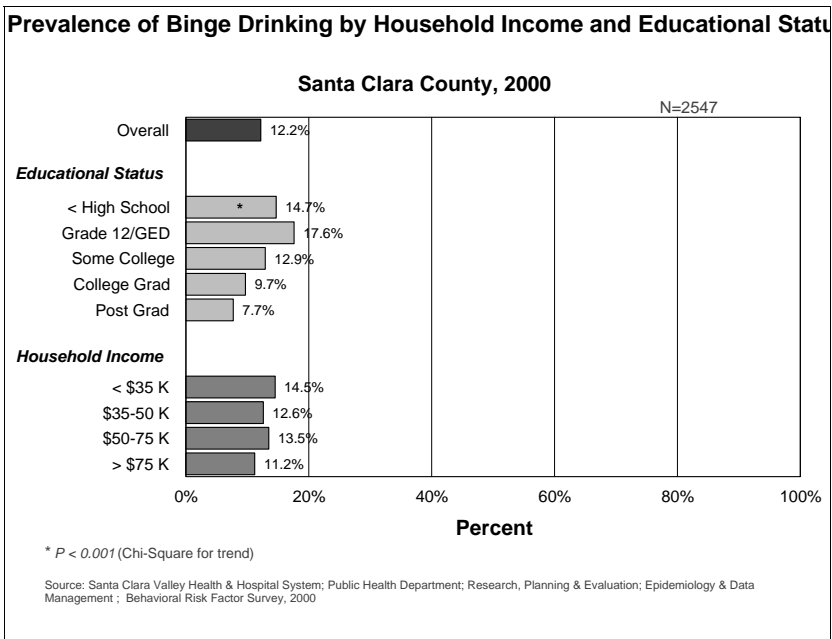
**Figure 3**



Binge or acute drinking was defined as drinking five or more drinks on the same occasion at least on one day during the past 30 days. Overall, the prevalence of binge/acute drinking reported was 12.2% (95% CI: 10.9%, 13.5%), which is well above the Healthy People 2010 target of 6% (Figure 3). Men were 4 times more likely to be binge drinkers than women (OR: 4.2; 95% CI: 3.16, 5.58).

**Figure 4**

The proportions of binge drinkers were the highest among Hispanics (17.4%) and African Americans (17.6%) and lowest among Asian/others (7.0%). Younger adults were more inclined to binge drink than older adults, with the proportion of binge drinkers declining as age increased. In addition, reported binge drinking was highest among participants who had less than a college education and decreased significantly as the years of education increased (Figure 4).



Factors associated with binge drinking are shown in Table 1. The factors associated with binge drinking include being Hispanic, not having a physical check up in the past 1 year, having less than a college education, being in a younger age group, having a job, being unmarried, being a smoker, male gender, and having multiple sex partners.

**Table 1**  
**Socio-demographic Predictors for Binge Drinking: Unadjusted Odds Ratios**  
**Santa Clara County, 2000**

Variables	Odds Ratio	95% CI
White (White=1, Non-White=0)	0.99	0.78, 1.25
Hispanic (Hispanic=1, Non-Hispanic=0)	<b>1.74</b>	<b>1.34, 2.26</b>
Asian (Asian/other=1, All others=0)	<b>0.47</b>	<b>0.34, 0.66</b>
Physical check-up within 1 year (Yes=0, No=1)	<b>1.87</b>	<b>1.47, 2.38</b>
Education (< than college=1, >=College=0)	<b>1.80</b>	<b>1.41, 2.29</b>
Household income (< 50 K=1, >=50 K=0)	1.20	0.93, 1.54
Age (<45 yr=1, >=45 yr=0)	<b>3.42</b>	<b>2.56, 4.57</b>
Employed (Yes=0, No=1)	<b>0.43</b>	<b>0.33, 0.57</b>
Married (Yes=0, No=1)	<b>3.16</b>	<b>2.46, 4.05</b>
Current smoker (Yes=1, No=0)	<b>3.47</b>	<b>2.65, 4.55</b>
Gender (Male=1, Female=0)	<b>4.20</b>	<b>3.16, 5.59</b>
General health (Poor/Fair=1, Others=0)	1.16	0.82, 1.63
Have multiple sex partner (Yes=1, No=0)	<b>4.13</b>	<b>2.91, 5.87</b>

Statistically significant 95% CIs are shown in bolds

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000



**Table 2**

**Socio-demographic Predictors for Binge Drinking: Adjusted Odds Ratios**

**Santa Clara County, 2000**

Variables	Odds Ratio	95% CI
Gender (Male=1, Female=0)	3.76	2.62, 5.40
Education (< than college=1, >=College=0)	1.61	1.12, 2.31
Married (Yes=0, No=1)	2.48	1.78, 3.47
Current smoker (Yes=1, No=0)	2.49	1.77, 3.51
Age ( <45 yr=1, >=45 yr=0)	2.40	1.44, 4.00
Have multiple sex partner (Yes=1, No=0)	1.87	1.23, 2.85
Asian (Asian/other=1, All others=0)	0.43	0.19, 0.94

Statistically significant 95% CIs are shown in bolds

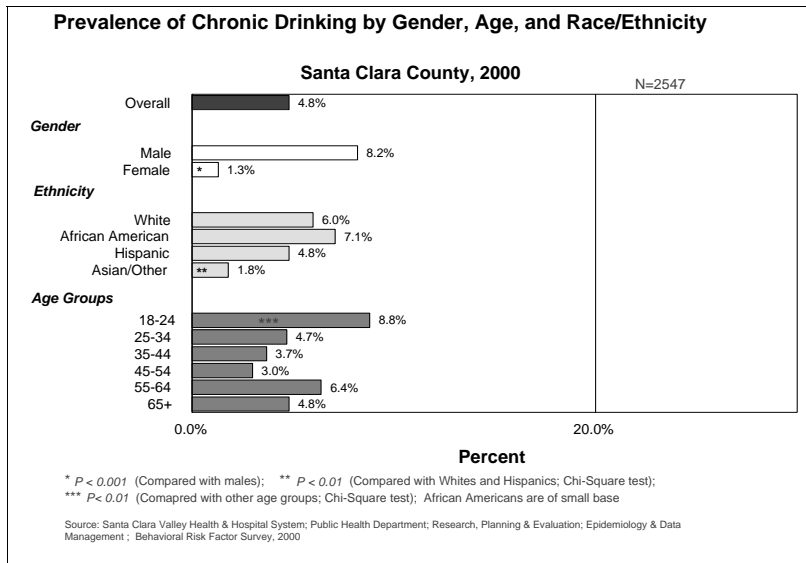
Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

After adjusting for confounding variables (Table 2), male gender, having less than a college education, being unmarried, being a smoker, being in a younger age group, non-Asian/other race, having a job, and having multiple sex partners were found to be significant predictors for binge drinking.

## Chronic Drinking

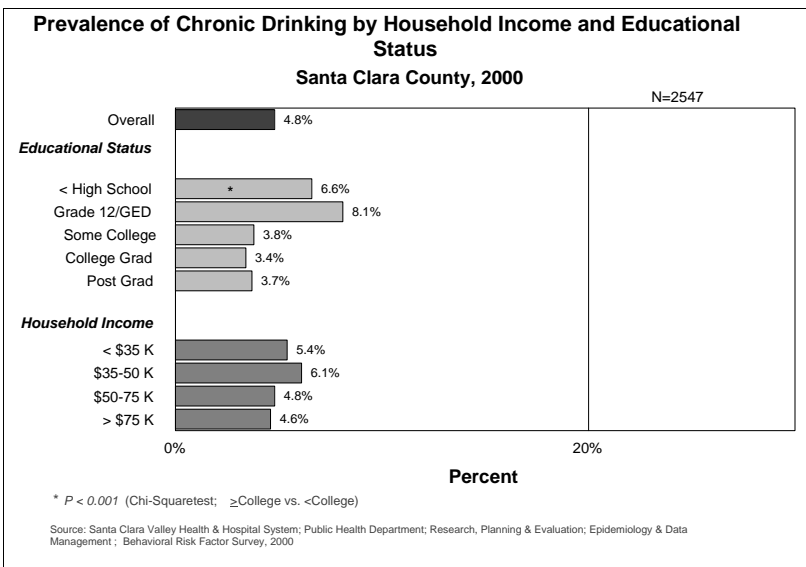
Chronic alcohol drinking was defined as drinking 60 or more alcoholic beverages (any combination of beer, wine, or liquor) within the last month. The overall prevalence of chronic drinking was 4.8%. The rates were 8.2% among males and 1.3% among females (Figure 5).

**Figure 5**



Higher proportions of Whites and Hispanics reported chronic drinking than Asian/ others. Chronic drinking was more frequent among adults younger than 25 years as compared to older adults. Moreover, chronic drinking was more common among respondents with less than a college education than those with at least some college education or higher (Figure 6).

**Figure 6**



## Behavioral Characteristics of Binge and Chronic Drinkers

**Table 3**

### Behavior and Attitudes Among Chronic Alcohol Abusers and Binge Drinkers

Santa Clara County, 2000

Alcohol Behavior	Chronic Alcohol Users	Binge Drinkers
	<b>Percent</b>	<b>Percent</b>
Drink first thing in the morning	20.7	43.7
Thought cutting down drinking	16.1	30.5
Ever felt guilty	13.4	27.6
Annoyed by others criticizing drinking	20.4	32.9

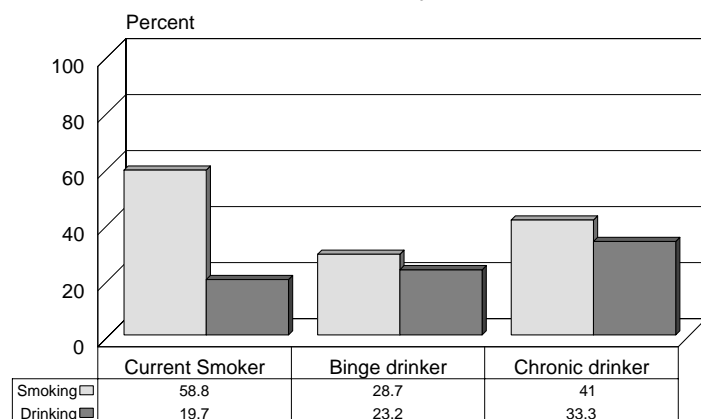
Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

Table 3 lists the behaviors and attitudes of chronic and binge drinkers. About 21% of chronic alcohol abusers and 44% of binge drinkers reported that they drank first thing in the morning to steady their nerves or “cure” a hang over. Yet, 16% chronic users and 31% binge drinkers thought that they needed to cut down on their drinking. Although 41% of chronic and binge alcohol users felt guilty about their drinking, 20% of chronic alcoholics and 33% of binge drinkers had been annoyed by others criticizing them about their drinking.

**Figure 7**

### Physician's Counseling on Smoking and Drinking by Smoking and Drinking Status

Santa Clara County, 2000



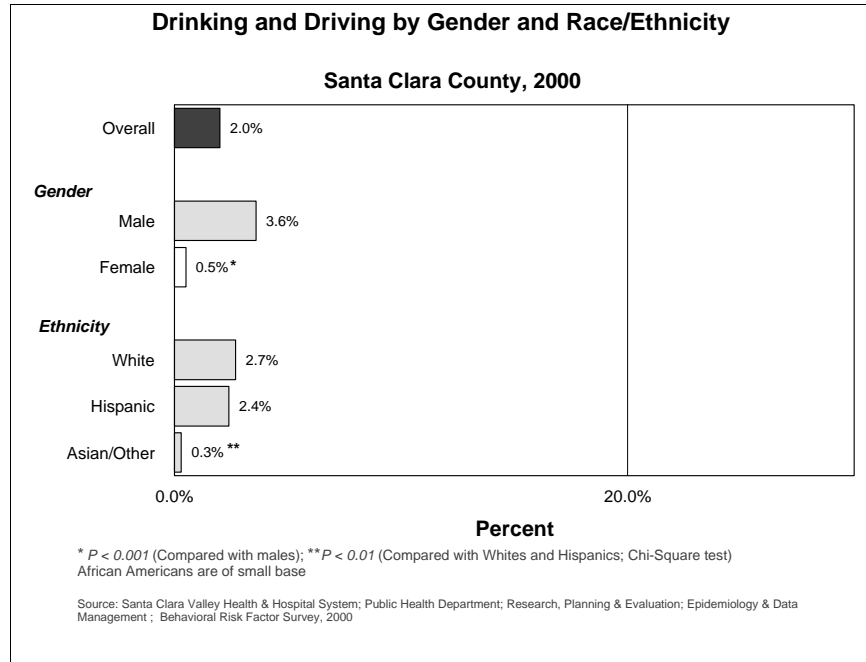
Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

About 23% of binge drinkers and 33% of chronic drinkers reported receiving advice from a physician about alcohol use within the last 3 years (Figure 7).

## Drinking and Driving

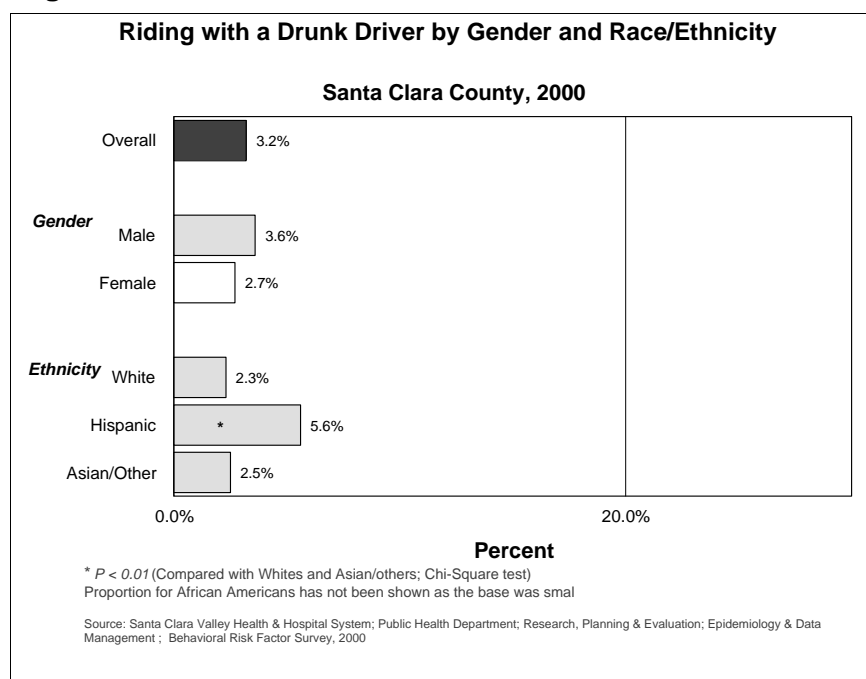
**Figure 8**

Figure 8 illustrates that 2.0% of those surveyed (95% CI: 1.5%, 2.6%) had driven while intoxicated at least once in the past 30 days preceding the survey. Males were 8 times more likely to drive while drunk than females (OR: 7.7, 95% CI: 3.2, 20.2). Asian/others were significantly less likely to drive while intoxicated as compared with Whites and Hispanics.



**Figure 9**

As shown in Figure 9, 3.2% of survey participants reported riding with a drunk driver. Riding with a drunk driver was mostly reported (5.6%) among Hispanics, and was significantly higher than Whites and Asian/others.

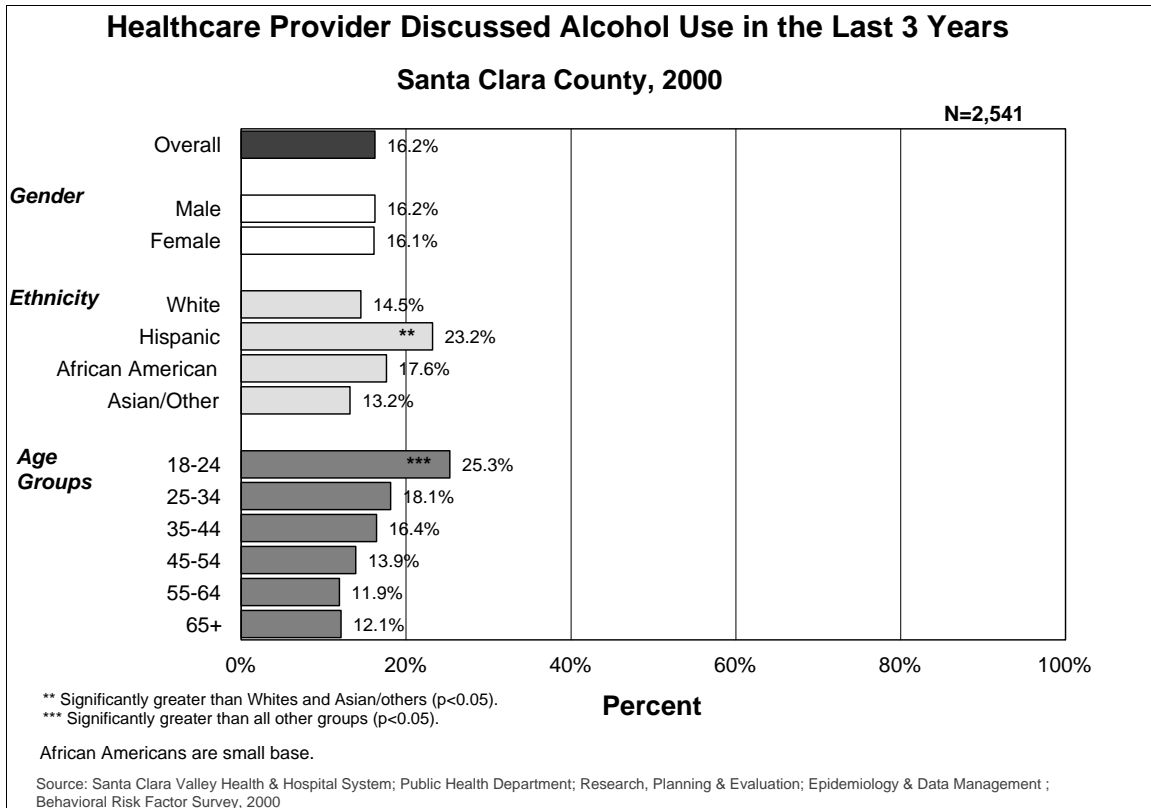


### Education on Alcohol Use

Figure 10 illustrates that 16.2% of respondents have received education on alcohol use from their HCP in the past three years. Respondents who were mostly counseled about alcohol use by their healthcare providers were Hispanics and younger adults age 18 to 34 years, regardless of gender.

Women 44 years and younger received more education on alcohol use than men in the same age group. The proportion for Whites and Asian/others receiving alcohol education precipitously dropped after age 44, whereas the proportion of Hispanics decreased after age 54 (data not shown).

**Figure 10**



### Summary of Key Findings for Alcohol Use

The data suggest that drinking was more prevalent among males, Whites, and among persons with higher education and income. However, binge and chronic drinking was significantly greater among respondents with lower education and income. Other predictors of binge drinking were male gender, being unmarried, being a smoker, and race other than Asian/others. Data also suggest that people with other risk behaviors such as smoking and having multiple sex partners were more likely to be at risk of binge drinking. Furthermore, more Hispanics, young adults age 18 to 34 years, and women 44 years and younger were counseled by their healthcare provider on alcohol use than respective groups, implying that education and prevention efforts may need to be geared more towards populations that are at risk for binge and chronic drinking.

## tobacco use

According to the Healthy People 2010 report (DHHS, 2000), cigarette smoking is the single most preventable cause of disease and death in the nation. Smoking results in more deaths each year in the United States than AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle crashes, and fires—combined.

The American Lung Association (n.d.) reports that smoking is responsible for one in five deaths and costs the economy at least \$100 billion in healthcare costs and lost productivity. Deaths related to smoking resulted from heart disease, stroke, cancer, or emphysema, which are all leading causes of death in the nation. Moreover, Healthy People 2010 asserts that smoking during pregnancy can result in miscarriages, premature delivery, low birth weight, and sudden infant death syndrome.

Furthermore, environmental tobacco smoke (ETS) and secondhand smoke, the smoke from other people's cigarettes, can harm the health of nonsmokers, causing many breathing problems in children in addition to cancer and heart disease in adults who are exposed over a long period of time. In fact, the U.S. Environmental Protection Agency (EPA, 1997, as cited by DHHS, 2000) claims that ETS is responsible for approximately 3,000 lung cancer deaths each year among adult nonsmokers.

Other forms of tobacco, such as cigar smoking, are not safe alternatives. The Health and Human Services' Surgeon General Report in 1982 noted that cigar use causes cancer of the larynx, mouth, esophagus, and lung.

Regardless of the hazards associated with tobacco use, the California Tobacco Survey conducted by the Cancer Prevention and Control Program from the University of California, San Diego (2001), found that adult smoking prevalence among Californians was 18.3% in 1999. Nationally, the American Lung Association (2001) delineated that approximately 47.2 million adults (24.1%) were current smokers in 1998, with a prevalence rate higher among 18-44 year olds. Although the annual prevalence of smoking declined 40% between 1965 and 1990, the rate has been unchanged thereafter, according to a 2000 USDA report cited in Healthy People 2010. Although 70% of smokers claim they want to quit, only 34% attempt to do so each year, and 2.4% actually succeed. This may due to the fact that 85% of smokers affirm that tobacco is addictive. Hence, this is indicative of the further need for prevention and intervention efforts in the public health arena.

## Healthy People 2010 Goal and Objectives: Tobacco Use

<b>Goal: Reduce illness, disability, and death related to tobacco use and exposure to secondhand smoke</b>		
<b>Objectives</b>		<b>Target</b>
1-3a	Increase the proportion of persons appropriately counseled about physical activity or exercise (adults age 18 years and older)	Developmental
3-10b	Increase the proportion of family physicians who counsel their at-risk patients about smoking cessation	85%
27-1	Reduce tobacco use by adults	
a	Cigarette smoking	12%
c	Cigars	1.2%
27-3	Reduce the initiation of tobacco use among children and adolescents (have question about age when first smoked on BRFSS survey)	Developmental
27-4	Increase the average age of first use of tobacco products by adolescents and young adults (age 18 to 25 years)	Average age: 17 years
27-5	Increase smoking cessation attempts by adult smokers	75%
27-6	Increase smoking cessation during pregnancy	30%
27-9	Reduce the proportion of children who are regularly exposed to tobacco smoke at home	10%
27-10	Reduce the proportion of nonsmokers exposed to environmental tobacco smoke	45%



## Data Analysis of BRFs Responses for Tobacco Use

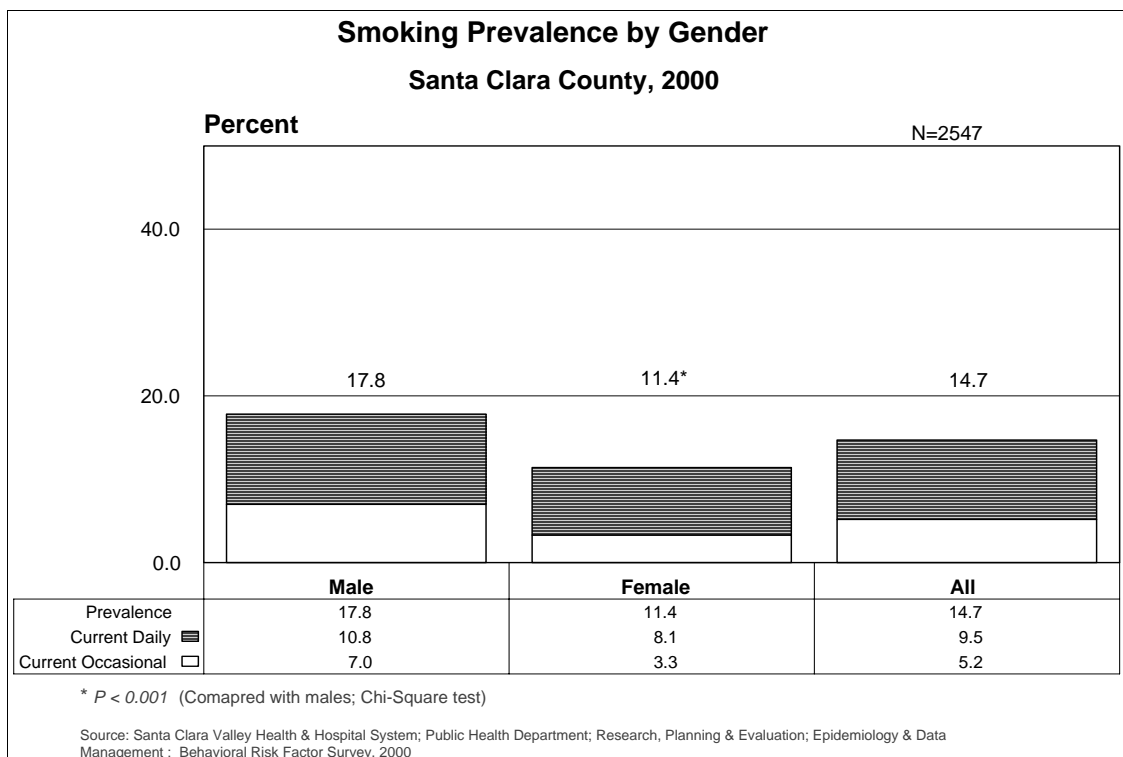
### Cigarette Smoking

Overall, the prevalence of smoking among adults 18 years and older was 14.7% (95% CI: 13.3%, 16.0%), as illustrated in Figure 11. The local rate stands less than four percentage points below the statewide average (18.3%) and almost 10 points below the nation's average (24.1%). Furthermore, the overall smoking prevalence in SCC has also been reduced by 2.2% from the BRFs 1997 rate of 16.8%. Despite lower prevalence of smoking among adults in SCC compared to 1997 and the state and national figures in 2000, the Healthy People 2010 target of 12% prevalence rate has yet to be met.

Of the total smokers, 64.7% were regular smokers (smoked daily) and 35.3% were irregular smokers (smoked some days only).

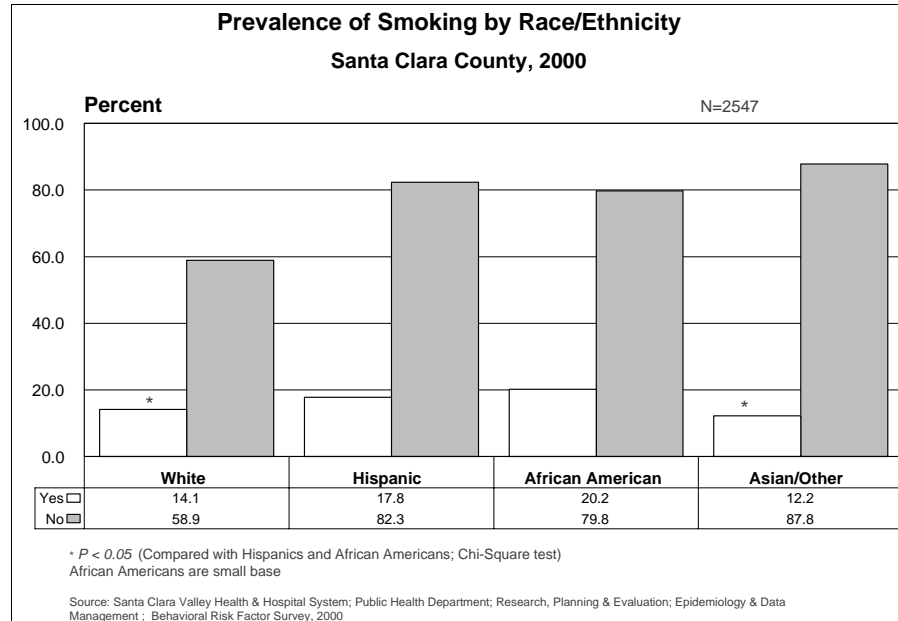
The prevalence of smoking among males and females were 17.8% (95% CI: 15.8%, 19.9%) and 11.4% (95% CI: 9.6%, 13.1%), respectively. Among reproductive-age women, smoking prevalence was 11.4% (95% CI: 9.1%, 13.7%) (figure not shown).

**Figure 11**



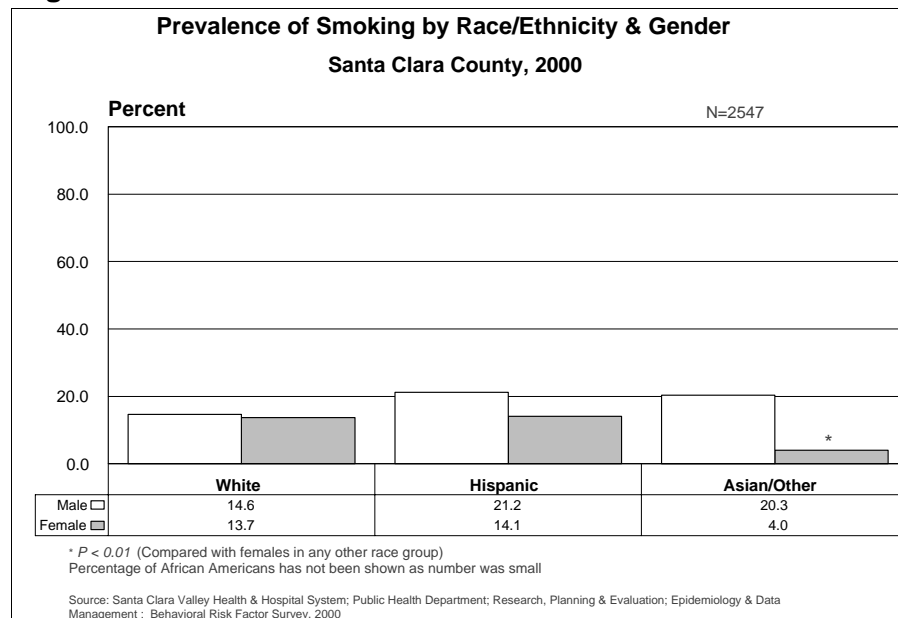
**Figure 12**

The prevalence of smoking was significantly higher among Hispanics (17.8%) than Whites (14.1%) and Asian/others (12.2%) (Figure 12).



**Figure 13**

Among males, the highest proportion of smokers was found in the Hispanic (21.2%), and Asian/other (20.3%) groups, followed by Whites (14.6%). Among females, higher proportions of Hispanics (14.1%) reported smoking, followed by Whites (13.7%) and Asian/others (4%).



**Figure 14**

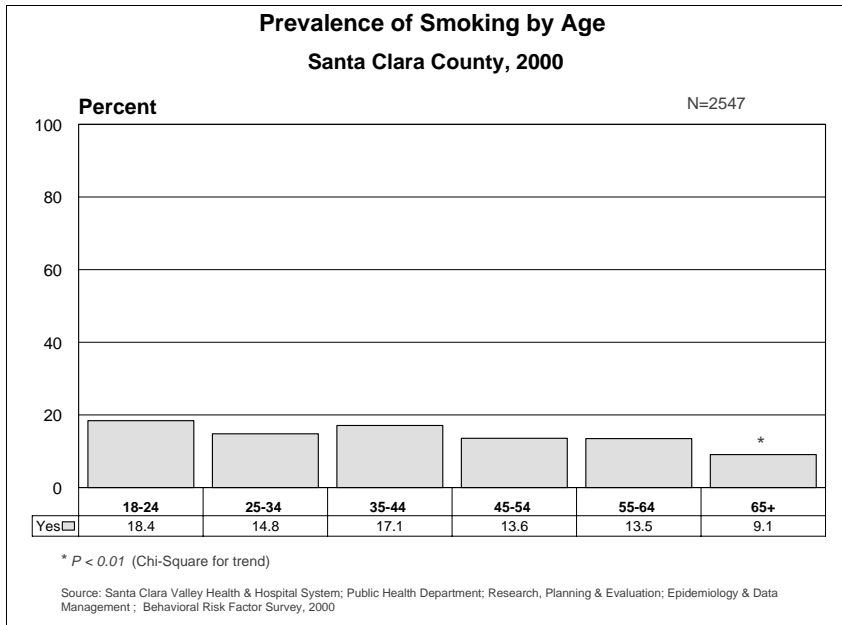
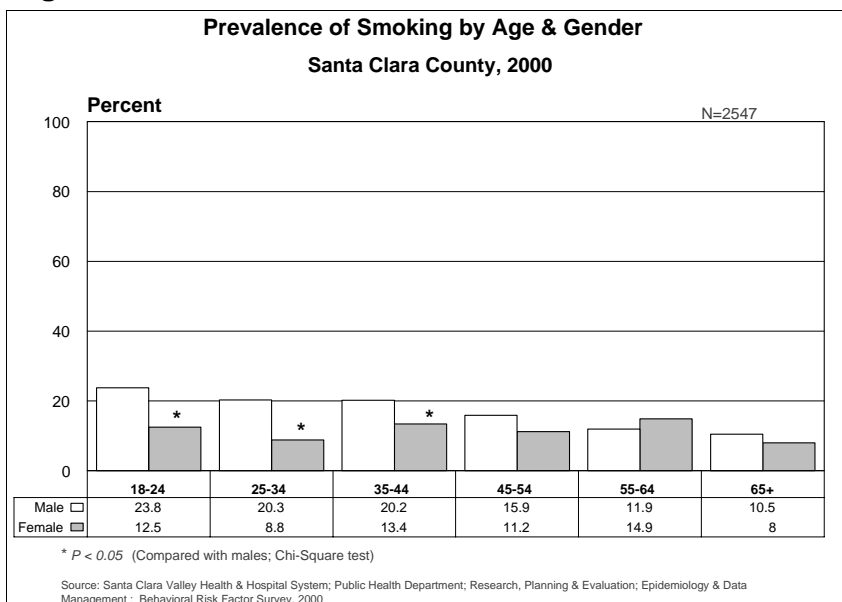


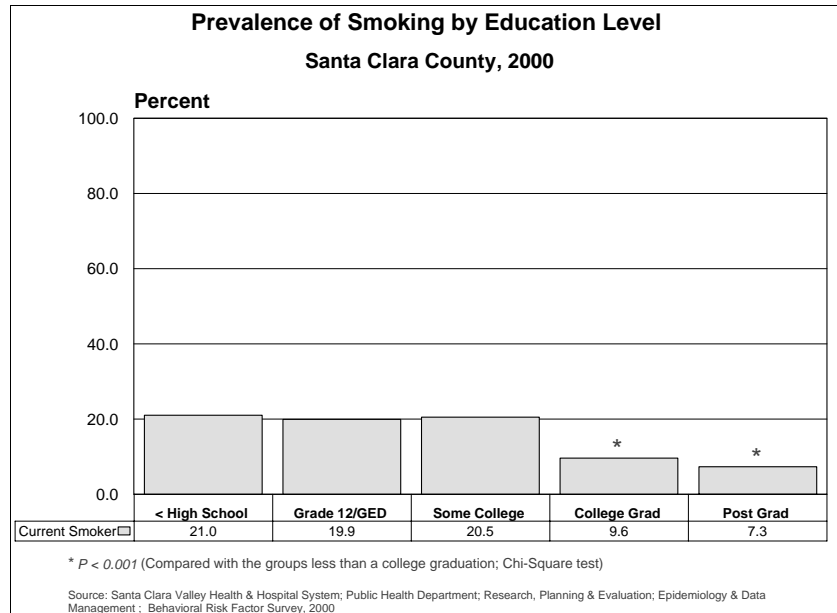
Figure 14 illustrates that as age increased, the prevalence of smoking decreased. Smoking prevalence was highest (18.4%) in the 18-24 age groups and lowest (9.1%) in the 65 years and over group.

**Figure 15**



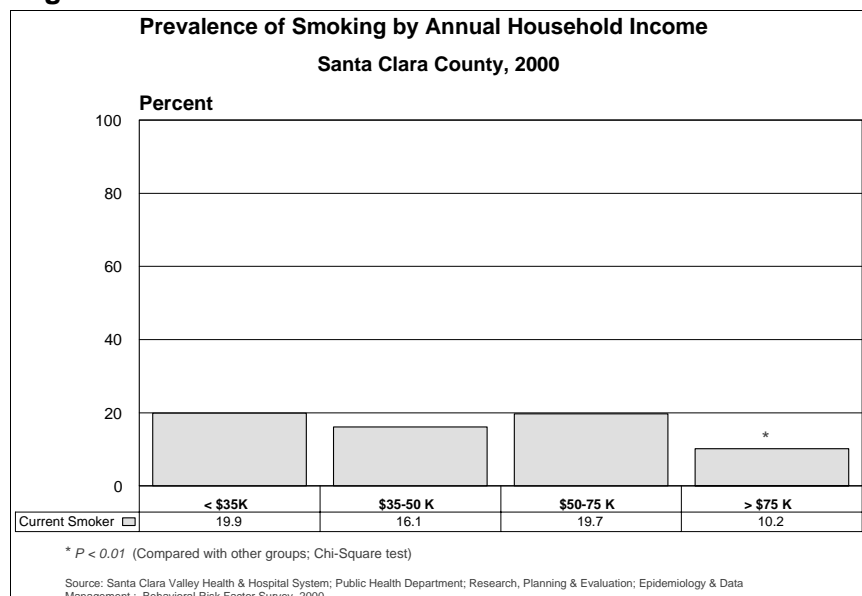
Compared to men, women in the childbearing age group (18 to 45 years) smoked significantly less. However, after the age of 45 years, smoking rates between men and women did not differ significantly (Figure 15).

**Figure 16**



Respondents who had a college degree or higher smoked significantly less than those who were not college graduates (Figure 16). In addition, smoking prevalence among individuals in the highest income (greater than \$75,000) group was significantly lower than those in lower income groups (Figure 17).

**Figure 17**



Unadjusted ORs, listed in Table 4, suggest that being Hispanic (OR: 1.34; 95% CI: 1.04, 1.73), not having routine physical checkups (OR: 1.45; 95% CI: 1.16, 1.81), having less than a college education (OR: 1.80; 95% CI: 1.44, 2.26), having a lower household income (OR: 1.54; 95% CI: 1.22, 1.93), being in a younger age group (OR: 1.44; 95% CI: 1.14, 1.81), being unmarried (OR: 2.07; 95% CI: 1.66, 2.59), being a

**Table 4**

## **Socio-demographic Predictors for Smoking: Unadjusted Odds Ratios**

### **Santa Clara County, 2000**

Variables	Odds Ratio	95% CI
Married (Yes=0, No=1)	<b>2.07</b>	<b>1.66, 2.59</b>
Age ( <45 yr=1, >=45 yr=0)	<b>1.44</b>	<b>1.14, 1.81</b>
Physical check-up within 1 year (Yes=0, No=1)	<b>1.45</b>	<b>1.16, 1.81</b>
Gender (Male=1, Female=0)	<b>1.70</b>	<b>1.36, 2.13</b>
Current drinker (Yes=1, No=0)	<b>1.36</b>	<b>1.08, 1.81</b>
Binge drinker (Yes=1, No=0)	<b>2.42</b>	<b>1.78, 3.30</b>
Have multiple sex partners (Yes=1, No=0)	<b>2.26</b>	<b>1.56, 3.26</b>
Education (< than college=1, >=College=0)	<b>1.80</b>	<b>1.44, 2.26</b>
Household income (< 50 K=1, >=50 K=0)	<b>1.54</b>	<b>1.22, 1.93</b>
General health (Poor/Fair=1, Others=0)	<b>1.40</b>	<b>1.03, 1.89</b>
Hispanic (Hispanic=1, Non-Hispanic=0)	<b>1.34</b>	<b>1.04, 1.73</b>
White (White=1, Non-White=0)	0.91	0.73, 1.13
Asian (Asian/other=1, All others=0)	0.77	0.59, 1.01
Employed (Yes=0, No=1)	0.83	0.66, 1.04

Statistically significant 95% CIs are shown in bolds

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

current drinker (OR: 1.36; 95% CI: 1.08, 1.81), being a binge drinker (OR: 2.4; 95% CI: 1.78, 3.30), male gender (OR: 1.70; 95% CI: 1.36, 2.13), having multiple sex partners (OR: 2.26; 95% CI: 1.44, 2.26), and perceiving oneself to be in poor general health (OR: 1.40; 95% CI: 1.03, 1.89) were all factors significantly associated with smoking. However, after making adjustments in the logistic regression analysis (Table 5), only male gender, having less than a college education, binge drinking, and unmarried status remained significant predictors for smoking. Persons with low income and not having routine physical checkups tended to smoke more (not statistically significant, but there was a trend).

**Table 5**

**Socio-demographic Predictors for Smoking: Adjusted Odds Ratios**

**Santa Clara County, 2000**

Variables	Odds Ratio	95% CI
Gender (Male=1, Female=0)	<b>1.64</b>	<b>1.20, 2.24</b>
Education (< than college=1, >=College=0)	<b>1.89</b>	<b>1.36, 2.62</b>
Married (Yes=0, No=1)	<b>1.45</b>	<b>1.06, 1.97</b>
Binge drinker (Yes=1, No=0)	<b>2.34</b>	<b>1.66, 3.29</b>
Hispanic (Hispanic=1, Non-Hispanic=0)	<b>0.50</b>	<b>0.26, 0.99</b>
Physical check-up within 1 year (Yes=0, No=1)	1.24	0.97, 1.59
Household income (< 50 K=1, >=50 K=0)	1.26	0.95, 1.67

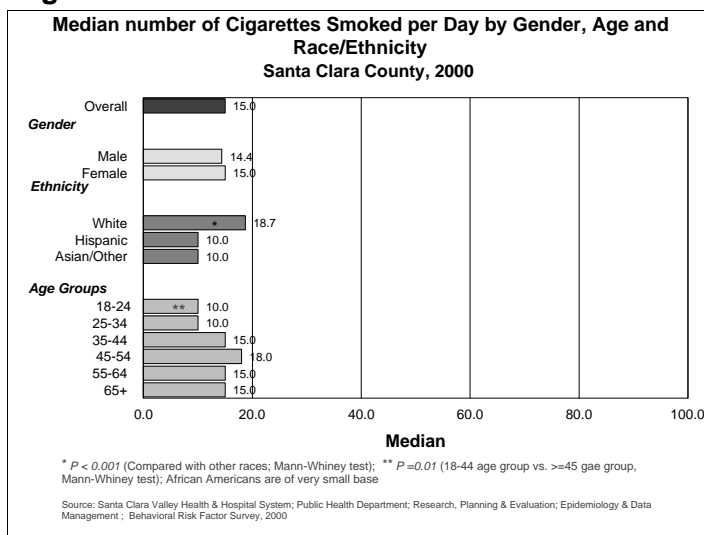
Statistically significant 95% CIs are shown in bolds

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

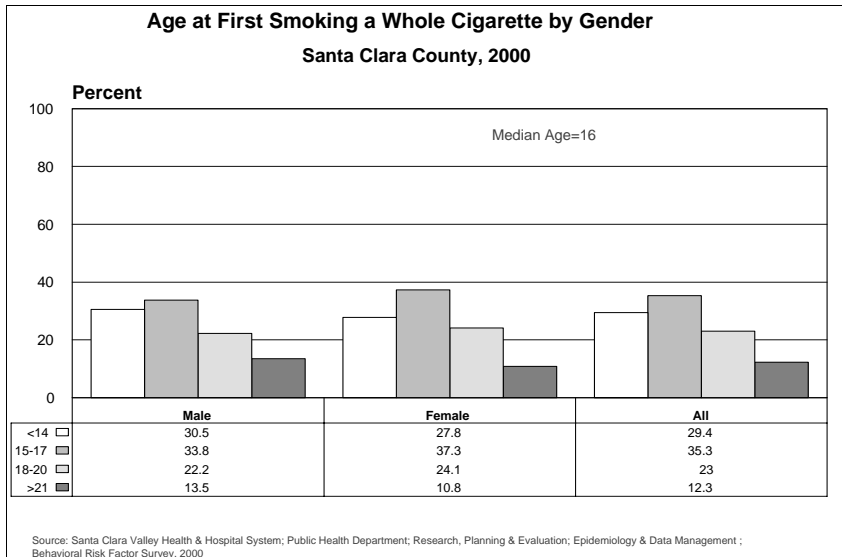
Among those who smoked everyday, the median average of the number of cigarettes smoked per day was 15.0 (1 pack=20 cigarettes), as depicted in Figure 18. Whites smoked the highest median number of cigarettes (18.7) per day, while Asian/others and Hispanic smoked the least (median was 10 cigarettes for each).

Although the prevalence of smoking was less among older people, older smokers reported smoking more numbers of cigarettes per day than their younger counterparts. Those under 45 years smoked a median number of 12 cigarettes per day, whereas those 45 years or older smoked a median number of 15 cigarettes per day ( $P=0.01$ ; Mann-Whitney test).

**Figure 18**

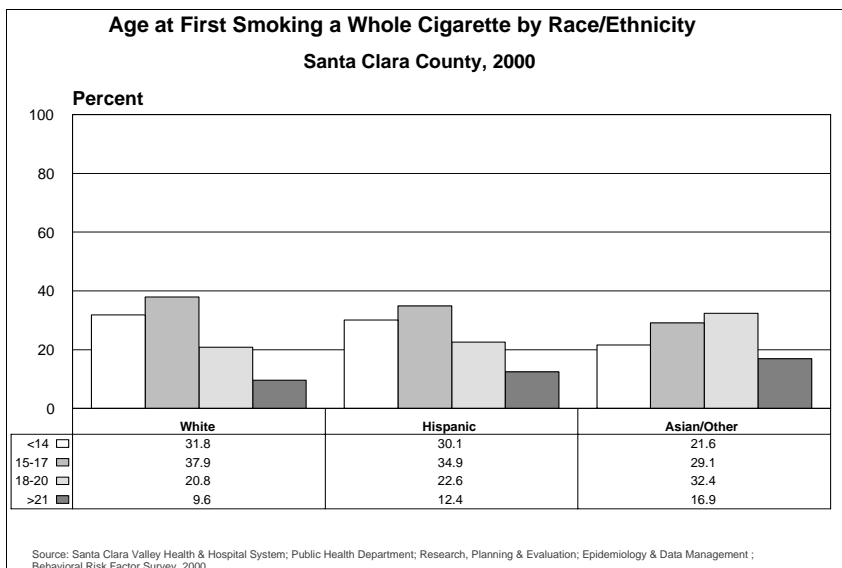


**Figure 19**



The median age at which participants reported smoking their first whole cigarette was at 16 years (Figure 19). Sixty five percent of smokers started smoking before age 18 and 29% started before age 14.

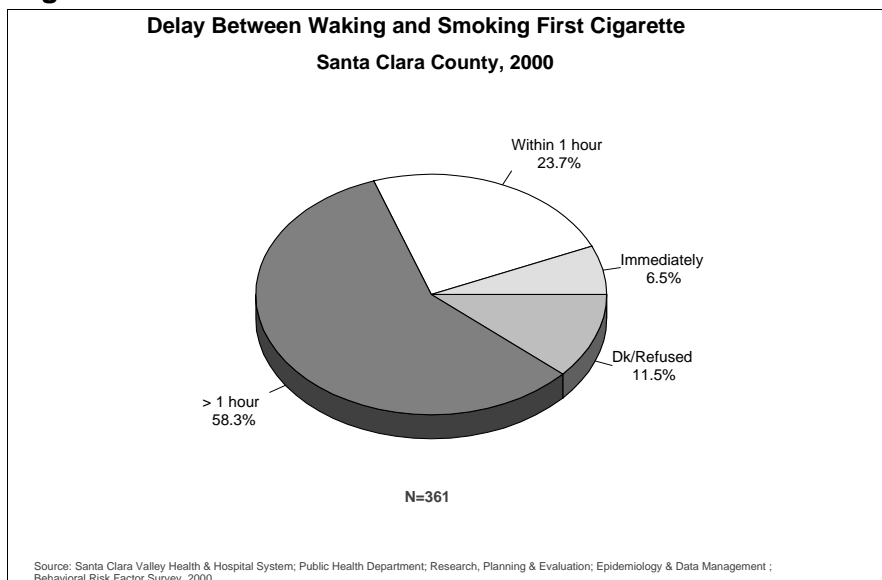
**Figure 20**



The proportion of participants who started smoking before age 14 were lower among Asian/others (22%) as compared with 32% and 31% among Whites and Hispanics, respectively; however, the difference was not statistically significant (Figure 20).

**Figure 21**

Nearly one third (30.2%) of daily smokers smoked within the first hour of waking (Figure 21). About 6.5% smoked immediately after waking. The median lag time between waking and smoking the first cigarette was 60 minutes.



**Table 6**

Respondents who smoked daily reported less stringent household restrictions on smoking than those who smoked occasionally or not at all (Table 6). One fourth (25.8%) of daily smokers, 12.4% of occasional smokers, and 9.3% of non-smokers reported not placing any restrictions on smoking in their homes.

**Household Rules for Smoking**  
**Santa Clara County, 2000**

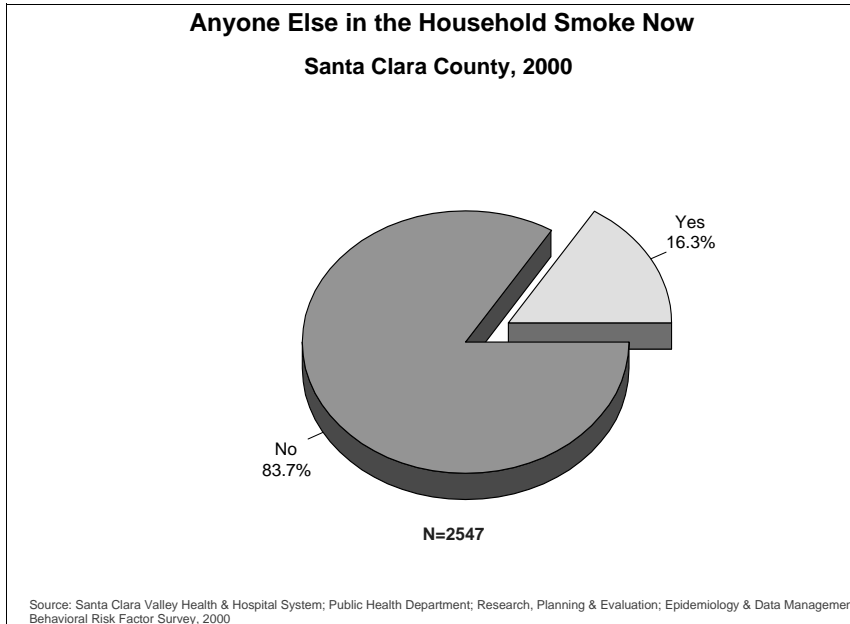
	Daily Smokers (%)	Occasional Smokers (%)	Non-Smokers (%)
Smoking is completely prohibited	25.0	45.0	70.0 <sup>1</sup>
Prohibited with few exceptions	4.6	8.5	6.8
Smoking is permitted in some rooms only	13.3	10.1	2.9
Smoking is permitted in yard	28.3	23.3	10.4
There are no restrictions on smoking	25.8	12.4	9.3
Others	2.9	0.8	0.6

1:  $P < 0.001$  (Chi-Square test)

Source: Santa Clara Valley Health & Hospital System; Public Health Department; Research, Planning & Evaluation; Epidemiology & Data Management ; Behavioral Risk Factor Survey, 2000

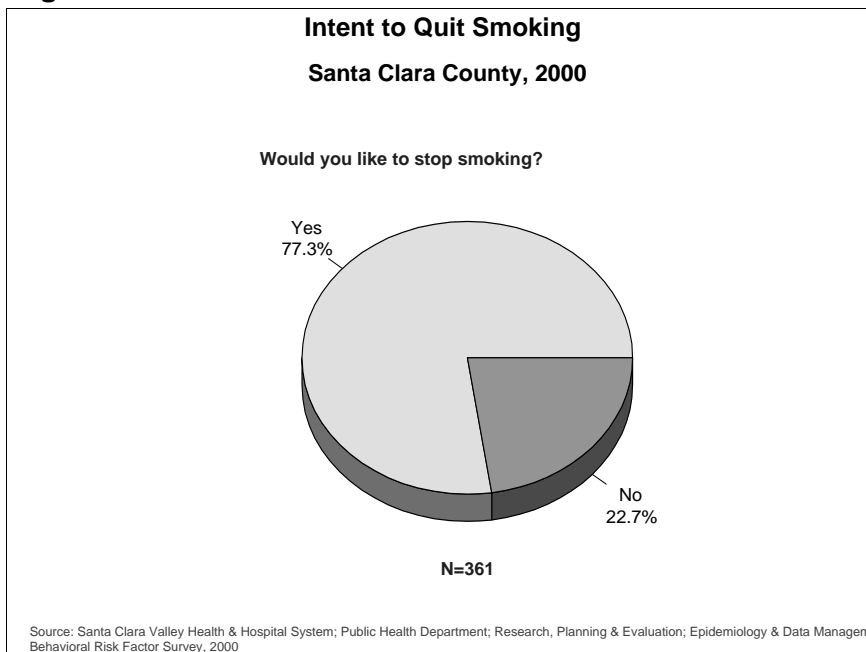


**Figure 22**



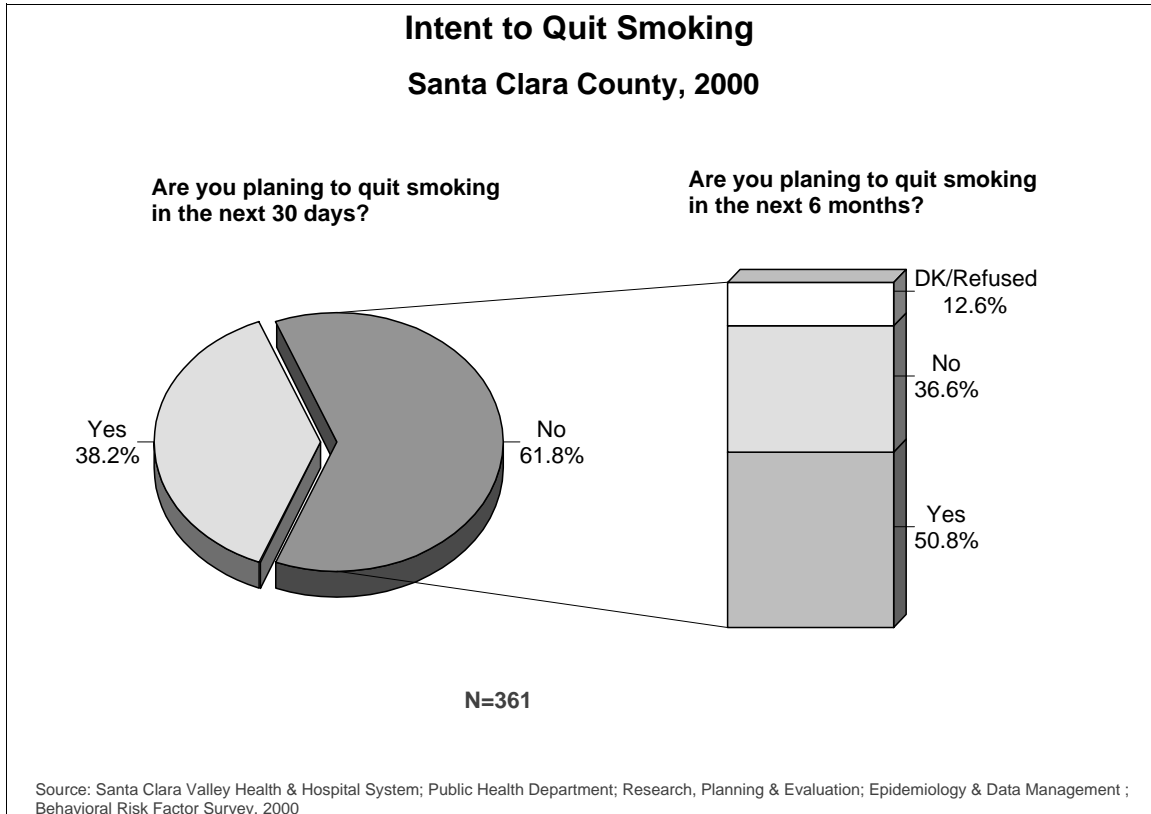
Of the total participants, 16% reported that someone else in the household smoked currently (Figure 22).

**Figure 23**



Among smokers who stopped smoking for 1 day during the past 12 months, 55.0% (95% CI: 49.1%, 60.9%) did so because they were trying to quit smoking (data not shown). This is far below the Healthy People 2010 smoking cessation target of 75%. Approximately 77.3% of smokers reported that they would like to quit smoking (Figure 23).

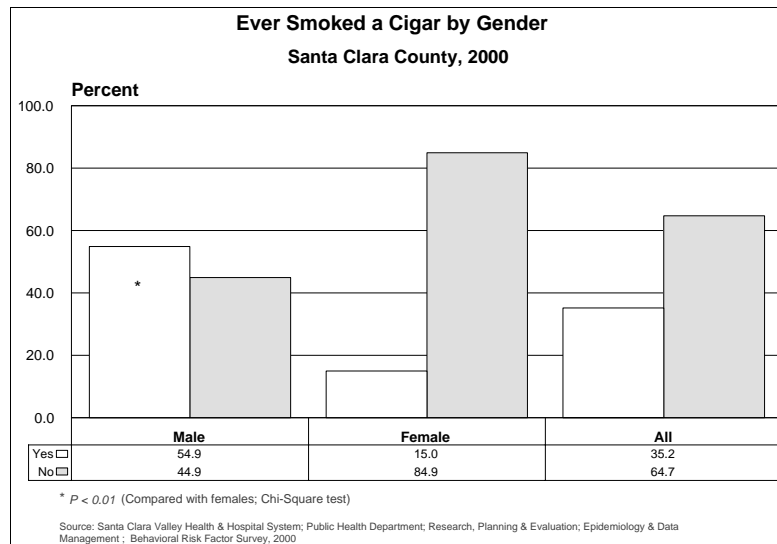
**Figure 24**



Only 38.2% of smokers intended to quit smoking in the next 30 days. Of those who would not quit smoking in next 30 days, 50.8% said they were considering quitting smoking in next 6 months (Figure 24).

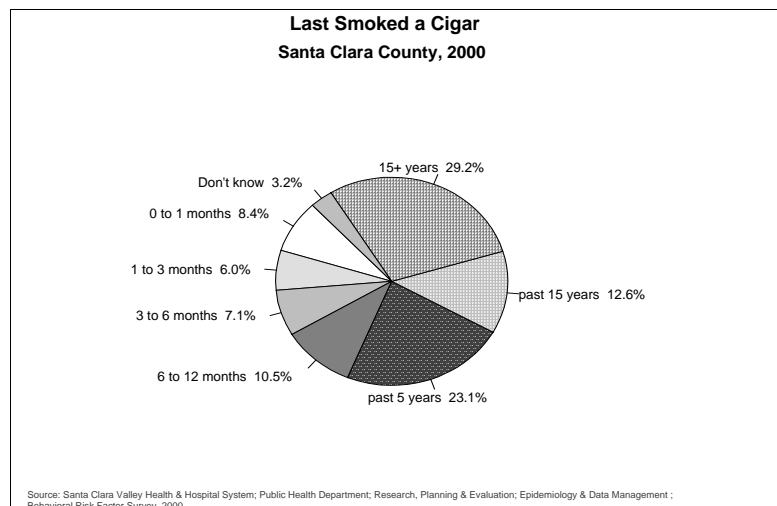
## Cigar Smoking

Figure 25



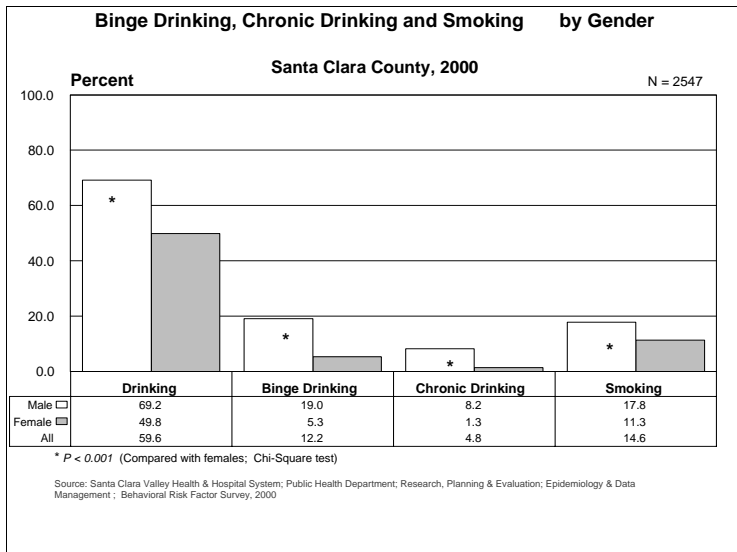
Overall, 35.2% (95% CI: 33.4, 37.1) of respondents had ever smoked a cigar. More males (55%) than females (15%) had smoked a cigar (Figure 25). Among those who had smoked a cigar, 32% smoked a cigar within the past year (Figure 26).

Figure 26



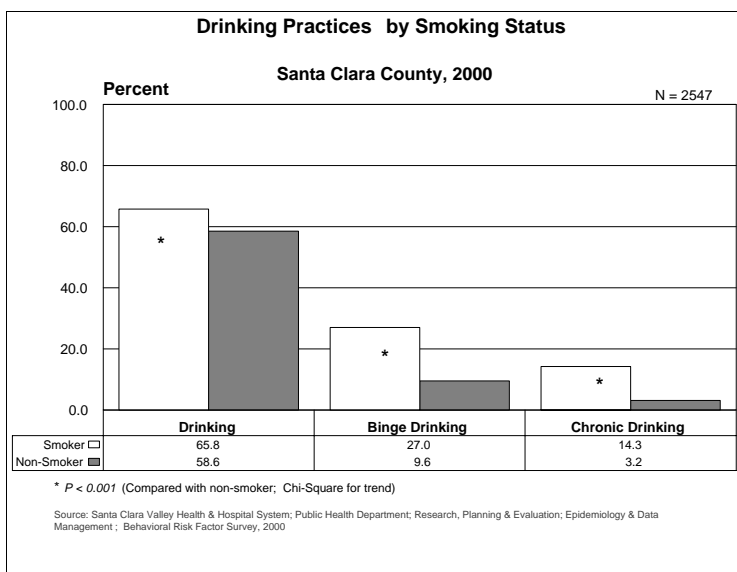
## Associations of Tobacco and Alcohol Use

**Figure 27**



Drinking and smoking poses great health problems for both men and women. Survey results found that men were at higher risk for both drinking and smoking than women (Figure 27).

**Figure 28**



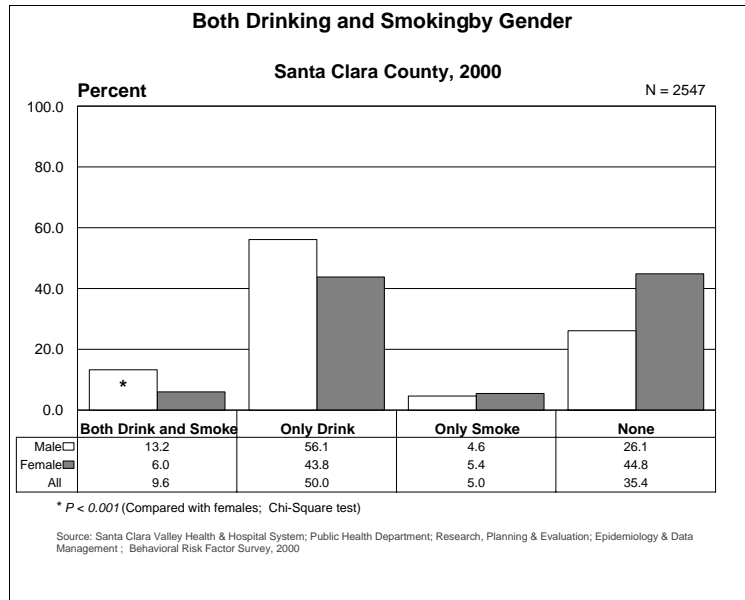
Compared to non-smokers, smokers were more at risk for social drinking, as well as binge and chronic alcohol abuse (Figure 28).

**Figure 29**

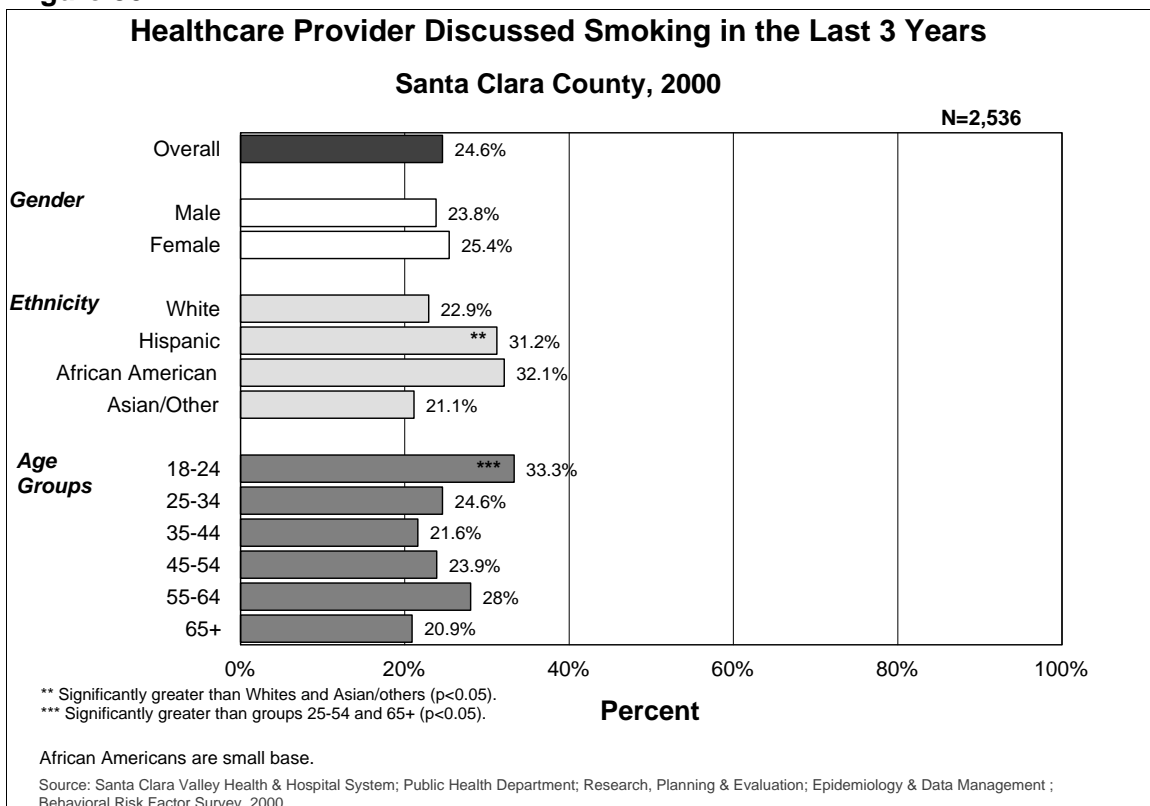
About 10% of participants both consumed alcohol and smoked; 13% men and 6% women (Figure 29).

## Education on Tobacco Use

Overall 24.6% of respondents (Figure 30) reported that healthcare providers had discussed the effects of smoking with them in the past 3 years. More Hispanics received counseling on smoking than Whites and Asians/others. Younger adults (younger than 25 years old) received more counseling than older adults (65 years and older).



**Figure 30**



Further analysis revealed that women age 44 years and younger reported a higher proportion of receiving education on smoking than men in the same age groups. Conversely, trends after 45 years of age showed that more men reported receiving smoking education from their healthcare providers than women. Though Asians/others reported receiving education on smoking less frequently than Whites, the trend reversed in the 45 to 64-year age group (data not shown).

### **Summary of Key Findings for Tobacco Use**

Overall, smoking prevalence was the highest among Hispanics followed by Whites and Asians. Among men, the prevalence of smoking was equally high among Asians/Others and Hispanics when compared to Whites. However, among women, smoking prevalence was significantly higher among Hispanics and Whites and very low among Asian/others. Further analysis by age, income, and education suggested that smoking was more prevalent among respondents with lower income, fewer years of education, and in younger age groups. Being unmarried and alcohol drinking were individual risk factors associated with smoking.

In comparison to BRFs 1997 results, significantly more survey participants discussed tobacco use with their healthcare provider in 2000 (a comparison of 1997 and 2000 BRFs results are shown in Appendix A). However, with less than 25% of respondents reporting to have received education on the effects of smoking in the BRFs 2000, there is more improvement needed for outreach, smoking cessation education, and prevention efforts in Santa Clara County.

## firearms

Findings from Fingerhut et al (as cited by DHHS, 2000) in 1992 showed that the increase in the total homicide rate in the U.S. from 1979 through 1993 resulted solely from increases in firearm-related homicides. According to the Emergency Nurses CARE, (2001), more than 70% of homicides are committed with a firearm.

Moreover, the incidence of injury resulting from firearms was double that of fatalities from firearms in 1997. CDC's study on fatal and nonfatal injuries resulting from firearms revealed that for each of the 32,436 people killed by a gunshot wound in 1997, approximately 64,872 others were treated for nonfatal wounds in hospital emergency departments (CDC, 1999, as cited by DHHS, 2000). Furthermore, more studies from the CDC found that the US had the highest rates of lethal childhood violence than every other industrialized country in 1995. Emergency Nurses CARE reports that deaths and injuries inflicted by firearms cost the U.S. about \$20 billion each year. The most serious firearm injuries, such as traumatic brain injury and spinal cord injury, can require a lifetime of care and rehabilitative services costing above \$1 million over the course of a patient's life.

Injuries and fatalities caused by firearms are either intentional or unintentional. Preventive measures and safety tips include promoting the use of gun locks, speaking to children about gun safety, treating all guns as if loaded, always pointing the gun in a safe direction away from people, keeping barrel/muzzle pointed towards ground when not in use, storing guns unloaded and locked away, separate from bullets, and removing firearms from a home if there is a potential for violence (i.e. where individuals are depressed or have a mental illness).

### Healthy People 2010 Goal and Objectives: Firearms

Goal: Reduce injuries, disabilities, and deaths due to unintentional injuries and violence		
Objectives		Target
15-3	Reduce firearm-related deaths	4.1 deaths per 100,000 population
15-4	Reduce the proportion of persons living in homes with firearms that are loaded and unlocked	16%
15-5	Reduce nonfatal firearm-related injuries	8.6 injuries per 100,000 population

## Data Analysis of BRFs Responses for Firearms

Overall, about 18% of respondents had some type of firearm in their homes, as illustrated in Figure 1. Around 19.3% (95% CI: 17.0, 21.7) of males responded to having some type of firearm in or around their living area. More respondents 55 to 64 years of age reported keeping a firearm in or around their home (25.8%; CI: 20.7, 30.9). A higher proportion of Whites (19.3%, CI: 17.3, 21.3) owned firearms as compared to Asian/others and Hispanics.

Approximately 91% of Hispanics did not have a firearm in their home (90.6%, CI: 87.9, 93.2) (data not graphed).

Among those who owned a firearm (N=380), 60% either owned a pistol or a revolver (see Figure 2). Among owners of handguns, there were no statistically significant differences among various demographic groups. Of these owners, 14% (95% CI: 9.5, 18.5) of the respondents had them loaded and not locked.

Figure 1

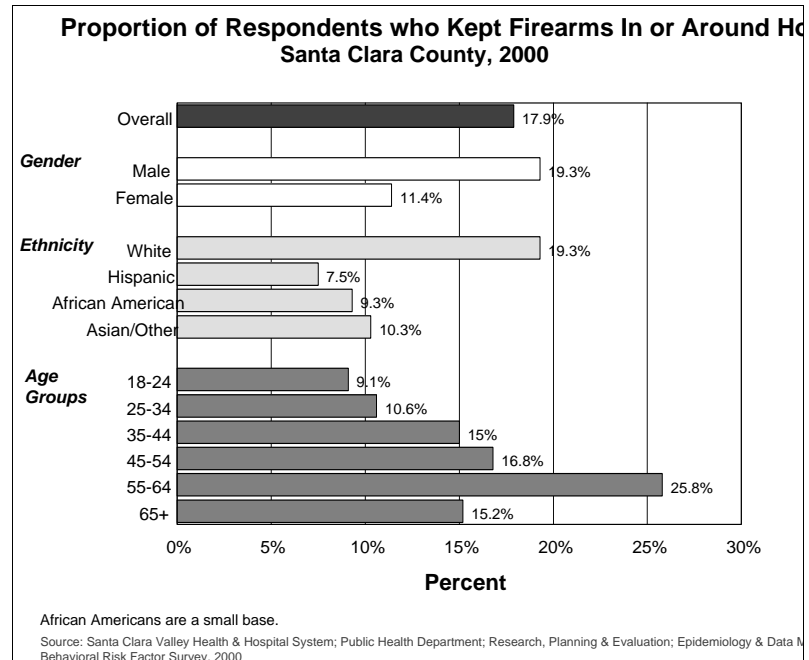


Figure 2

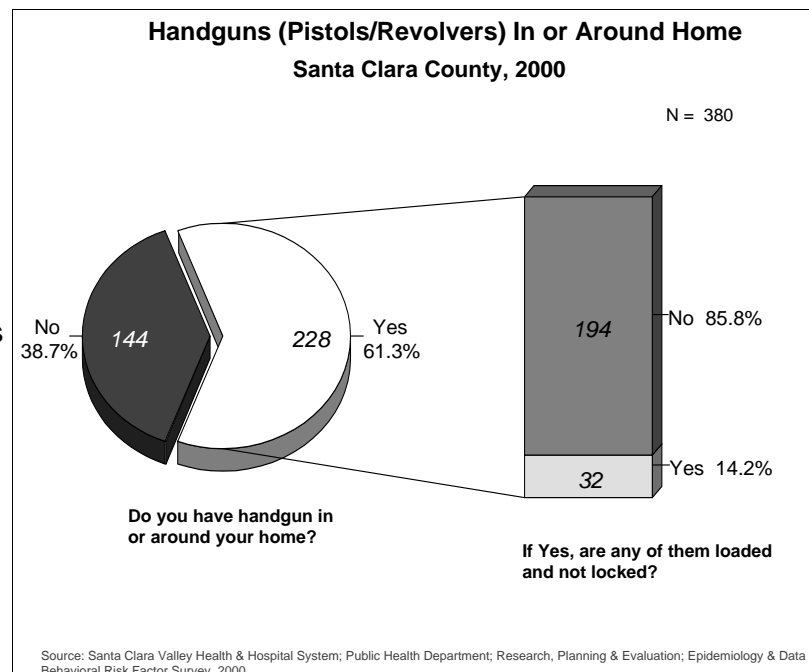




Figure 3

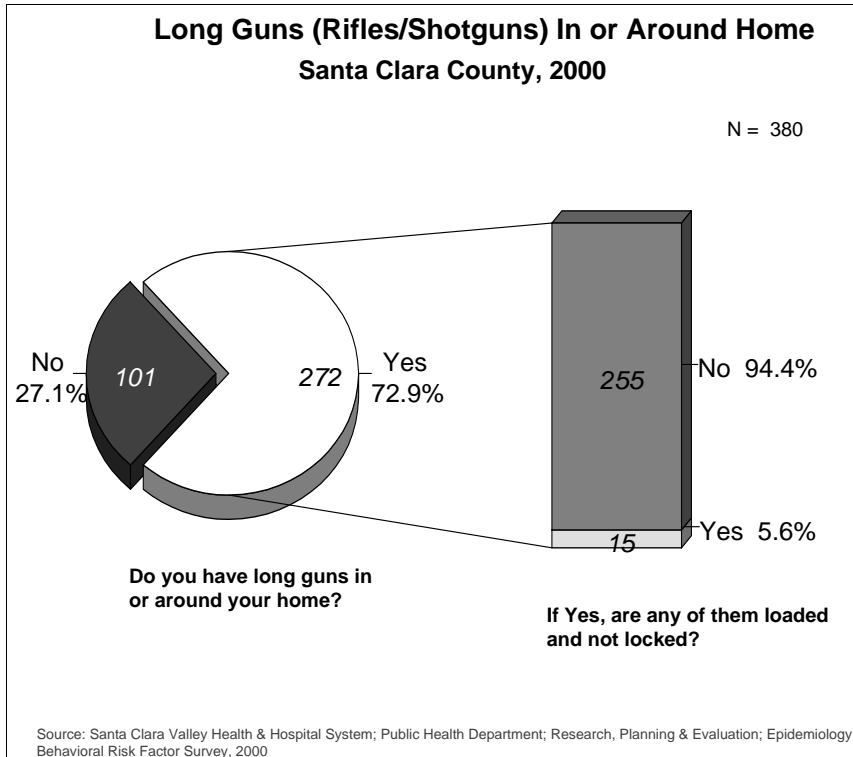


Figure 3 shows that among those who owned a firearm (N=380), 73% owned either rifles or shotguns. A higher proportion of men (79.3%, CI: 73.9, 84.7) responded to owning these compared to women (61.3%, CI: 53.9, 68.8). A majority of those who answered, "yes" to owning rifles or shotguns were Whites (N=222, 81.6%) (Data not graphed). Among those who owned long guns (rifles or shot guns), 5.5% (95% CI: 2.8, 8.2) had these firearms loaded and not locked.

Figure 4

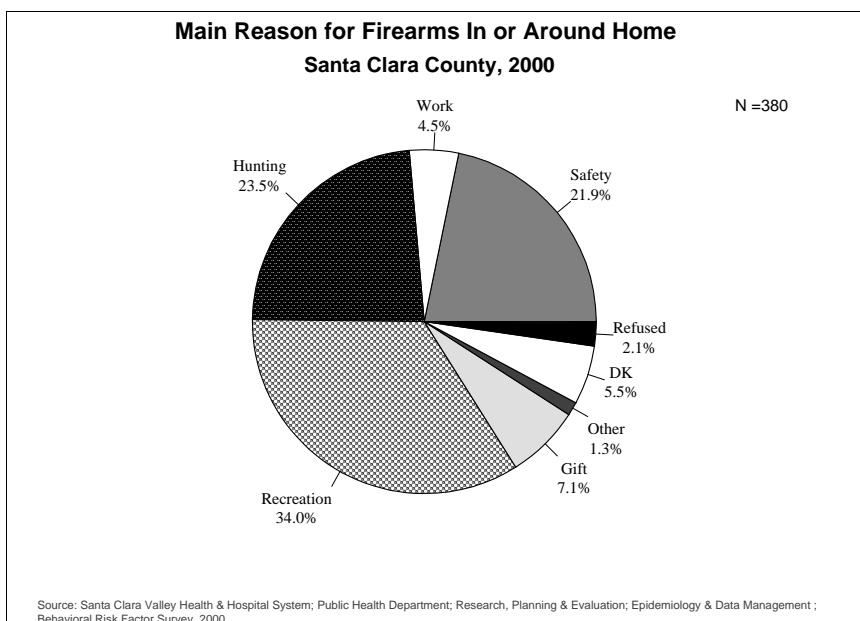
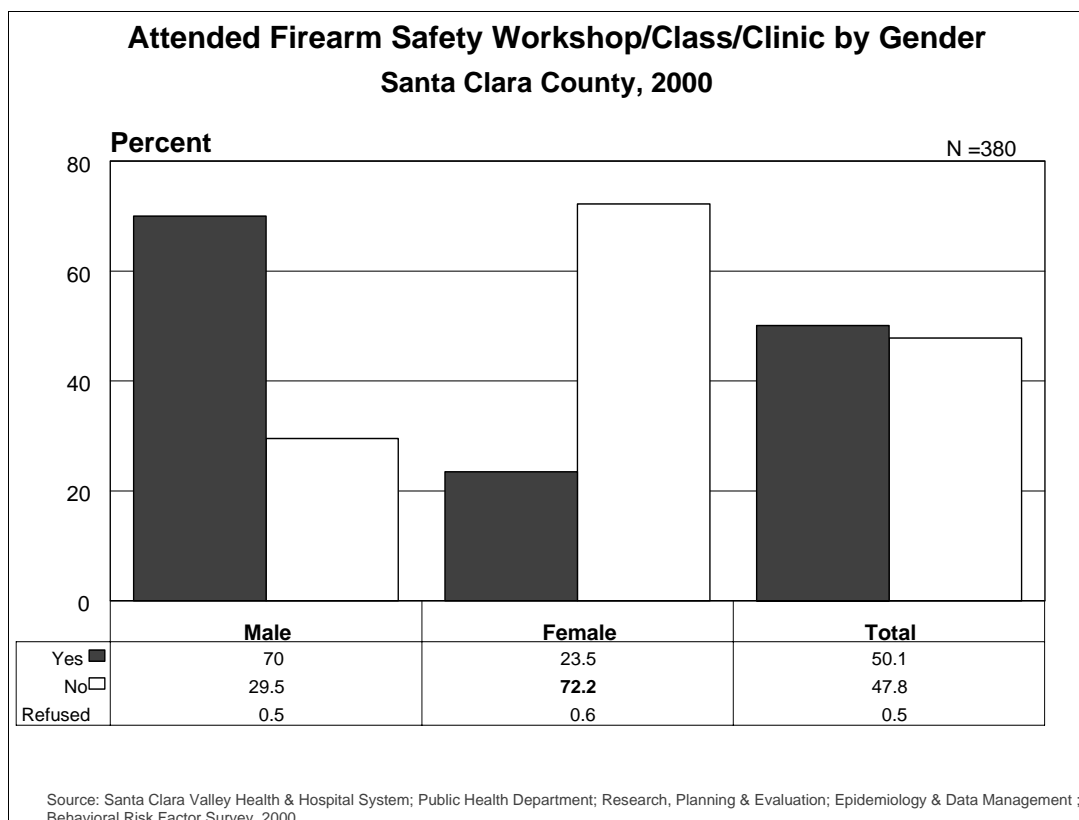


Figure 4 illustrates reasons for having firearms in or around homes. The major reasons for owning firearms were recreation (34%), hunting (23.5%) and safety or self-protection (21.9%). A higher proportion of men reported hunting as a reason for owning a firearm compared to women (data not shown).

Overall, 47.8% of respondents who owned a gun did not attend a firearm safety workshop, as depicted in Figure 5. The percentages differed significantly between men and women (29.5% and 72.2% respectively). Less than one percent responded that they used their firearm to shoot or scare a home intruder in the past year.

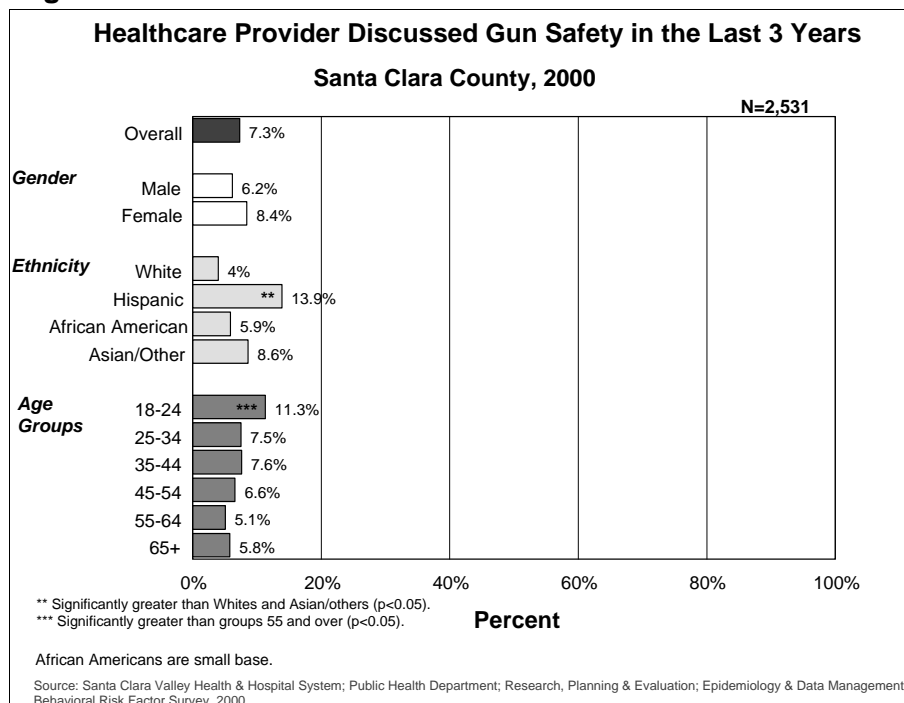
**Figure 5**



In the general population of respondents, around 7.3% of the respondents received some preventive education on gun safety (Figure 6). However, among those who owned firearms, only 5% received preventive education on gun safety (Figure 5). This percentage did not differ among those who received a routine checkup from a healthcare provider (data not shown).

Among those who owned firearms, 152 respondents (40%) had children under 18 in their households; a majority of them were White (68%), followed by Asian/other (17%), Hispanic (13%) and African American (2%). A significant proportion (65.8%, 95% CI: 61, 70.6) had a household income of \$50,000 or more and most of them had higher than a high school education as well as a health insurance plan at the time of the survey. Over half of those who reported owning firearms (60%) were married and perceived their health status to be very good or excellent (63%). There were no differences in the number of physically or mentally ill days between those who owned firearms and those who did not (data not shown).

Figure 6



### Summary of Key Findings for Firearms

Survey results found that about 380 individuals or 18% of the respondents owned a firearm at the time of the survey. The Healthy People 2010 target is to reduce the proportion of persons living in homes with firearms that are loaded and unlocked to 16%. Among firearm owners, 14% who owned handguns and 5.5% who owned long guns had their guns loaded and unlocked. There were no significant differences between locking and not locking across educational status, income levels, age groups, ethnic groups, and genders. In many cases, the numbers were too small to lead to any meaningful interpretation. Overall, 70% of those who owned a firearm attended a firearm safety class and only about 5% received any gun safety education from their healthcare provider. Responses to questions on firearms are generally prone to more biases than other questions in the survey. Respondents may not feel comfortable revealing their ownership of firearms. Hence, the prevalence of ownership may actually be higher in the community.

In comparison to BRFs 1997 results, more survey participants reported owning handguns and receiving education on gun safety from a healthcare provider in 2000. Reasons for owning firearms were similar for both years. However, more respondents reported owning a firearm for “safety/self-protection” and “other” in 1997, whereas more respondents reported owning a firearm for “hunting,” in 2000. A comparison of 1997 and 2000 BRFs results are available in Appendix A.

## intimate partner violence and sexual assault

The Healthy People 2010 report (DHHS, 2000) states that both females and males experience intimate partner violence (IPV) and sexual assault. Although perpetrators can be the same or the opposite sex, male victimization of females is more common. In addition, males who are physically violent toward their partners are more likely to be sexually violent toward them and are more likely to use violence toward children.

### Intimate Partner Violence (IPV)

The Federal Bureau of Investigation (FBI) database indicated that in 1995, 85% of the nearly 5,000 females murdered were killed by someone they knew (FBI, 1997, as cited by DHHS, 2000). In nearly half of these incidents, the offender was a husband, ex-husband, or boyfriend. Furthermore, the Bureau of Justice's statistics deduced that 37% of the 500,000 women seen in emergency departments for violence-related injuries were inflicted by spouses, ex-spouses, or non-marital partners (BJS, 1997, as cited by DHHS, 2000). Although most assault victims survive, it is important to note that they also suffer physical and emotional trauma.

Findings from the National Violence Against Women Survey (Tjaden et al, 1998, as cited by DHHS, 2000) estimated that 1.5 million females and 834,700 males are raped and/or physically assaulted by an intimate partner annually in the United States. Approximately 76% of the females who were raped and/or physically assaulted since age 18 were assaulted by a current or former husband, cohabiting partner, or date, compared with 18% of males. Furthermore, about one in three females who were injured during a rape or physical assault required medical care.

### Sexual Assault

Sexual assault is defined as unwanted sexual contact or forced sex that includes oral, anal, or vaginal intercourse and in situations when threats, physical force, or a weapon is used (DHHS, 2000). This also includes circumstances when a person was unable to give consent due to age, drugs, alcohol, sleep, or mental disability. The FBI's offense coding structure classifies sexual assault into four separate offense categories. From most to least serious, these crimes are forcible rape, forcible sodomy, sexual assault with an object, and forcible fondling.

Results from the National Women's Study, along with estimates from the U.S. Census, found that approximately 12.1 million females in the U.S. have been victims of forcible rape sometime in their lives (Kilpatrick et al, 1992, as cited by DHHS, 2000). In addition, 0.7% of adult females experienced a forcible rape in the previous year. In spite of the high prevalence of rape across the U.S., it is speculated that the occurrences of sexual assaults remain underreported.

The problem of sexual assault does not only involve adult females. Snyder (2000) found that 67% of all victims of sexual assault reported to law enforcement agencies were juveniles (under the age of 18), and 34% of all victims were under age 12. Furthermore, one of every seven victims of sexual assault reported to law enforcement agencies were under 6 years old.

**Healthy People 2010 Goal and Objectives:  
Intimate Partner Violence and Sexual Assault**

<b>Goal: Reduce injuries, disabilities, and deaths due to unintentional injuries and violence</b>		
<b>Objectives</b>		<b>Target</b>
15-33	Reduce maltreatment and maltreatment fatalities of children	
a	Reduce maltreatment of children	10.3 per 1,000 children under age 18 years
b	Reduce child maltreatment fatalities	1.4 per 100,000 children under age 18 years
15-34	Reduce the rate of physical assault by current or former intimate partners	3.3 physical assaults per 1,000 persons age 12 years and older
15-35	Reduce the annual rate of rape or attempted rape	0.7 rapes or attempted rapes per 1,000 persons
15-36	Reduce sexual assault other than rape	0.4 sexual assaults other than rape per 1,000 persons age 12 years and older

**Overview of Intimate Partner Violence (IPV) and Sexual Assault Pilot Section**

The Centers for Disease Control & Prevention (2001) uses a specific term, “Intimate partner violence,” (in contrast to, “domestic violence”) and is defined as actual or threatened physical or sexual violence, or psychological/emotional abuse by a spouse, ex-spouse, boy-friend/girl-friend, ex- boyfriend/girlfriend, or date. Intimate partner violence (IPV) is a substantial public health problem for Americans, which has serious consequences and expenditures for individuals, families, communities, and the society (Bachman and Saltzman, 1995 and Greenfeld et al, 1998, as cited by CDC, 2001).

Few studies provide population based estimates of IPV for men and women, especially at the county level. Santa Clara County's 2000 BRFSS piloted the Intimate Partner Violence & Sexual Assault questions based on the ones developed by the CDC (2001). The IPV and Sexual Assault section was the last set of questions in the BRFSS 2000, which were optional for the respondents. This section contained 19 questions on violence and sexual assault and was administered to all BRFSS participants who agreed to participate in this optional section. Detailed questions on abuse and assault were asked of all respondents who did not decline to reveal that they were assaulted or abused.

Some of the operational, methodological, and analytical challenges with this section were the following: refusal rates and limitations.

### Refusal Rates for the Pilot IPV and Sexual Assault Section

It is not clear how much of the differences in the refusal rate can be explained by respondent's unwillingness to report information to interviewers and how much they differ by social, demographics, and environmental factors.

The average refusal rate for questions that addressed experience with violence was 15.3%. Specific questions that applied to a subset of respondents had a higher average refusal rate of 76.6%. Similarly, the average refusal rate for questions that addressed sexual abuse was 28.6% and specific questions that applied to a subset of respondents had a higher average refusal rate of 83.3%.

Females, older adults, and Asian/others generally had a higher refusal rate for most of the questions listed in Table 1.

**Table 1**

### Questions With High Refusal Rates

Type of Question	Base	Number of	Ref.
Questions involving sexual abuse	Asked of all (N=2,547)	4	28.6
	Asked of those saying "no" to forceful sex	1	83.3
Questions involving violence behavior	Asked of all	8	15.3
	Asked those who did not answer "no" to experienc-	2	76.6

### **Limitations for the Pilot Intimate Partner Violence (IPV) and Sexual Assault Section**

There were many limitations with data collection, responses, and analysis of the findings in this section. Questions about injuries were about those that occurred in the recent year, thus potentially underestimating the total number of injuries a person received. Additionally, data were based on self-report and therefore, may not have been representative of patterns of control and abuse. Furthermore, questions on the context of the violence, number, and types of violent acts were not ascertained. History of victimization and perception of violence and sexual assault was not gathered. Because of the sensitive nature of the subject area and the questions, respondents may have been likely to under-report. Nationally, 50% of all homeless women and children are on the streets because of violence at home (Zorza, 1991). This study will not be able to address violence in this context.

The analysis of the small sample of respondents limits power to provide precise estimates of IPV by stratified categories. Because information about behaviors of the perpetrator was not collected, further analysis on cause and predictors of victimization is not possible from this survey.

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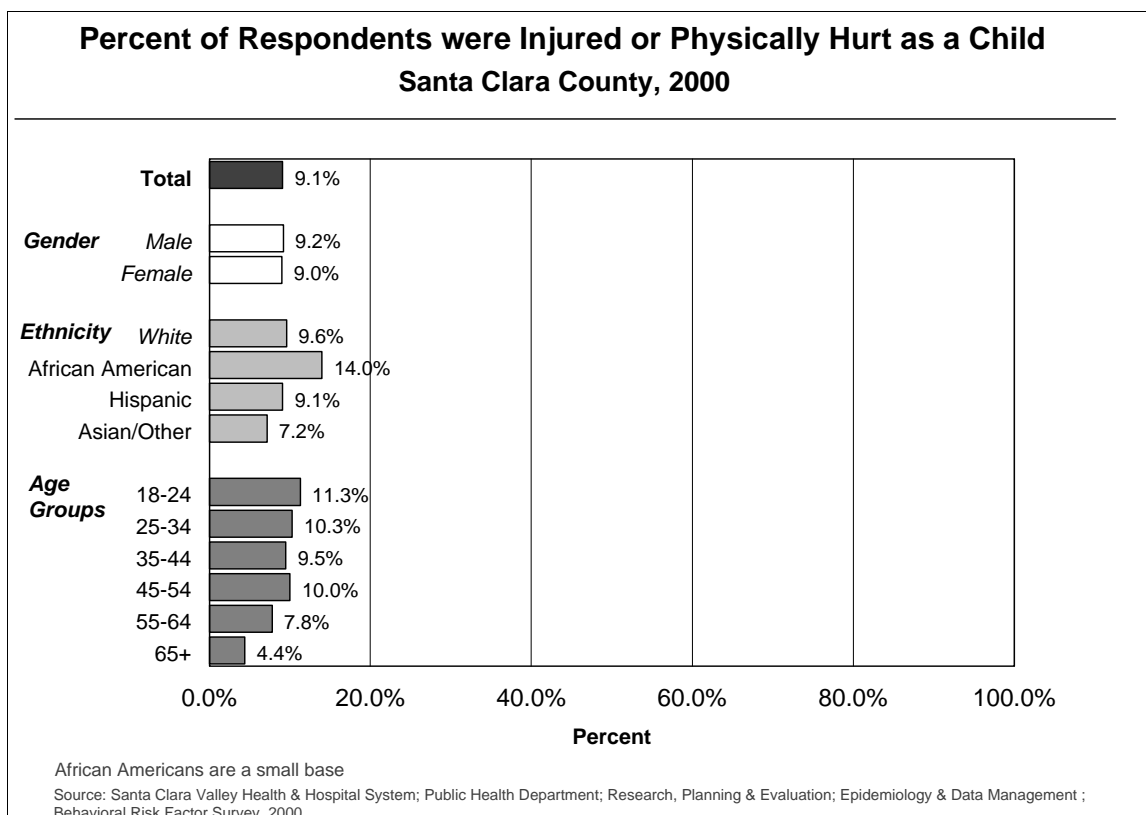


### Data Analysis of BRFs Responses for Intimate Partner Violence (IPV)

A summary of responses and analysis is provided on page 232 in Table 2. Figure 7 illustrates that about 9.1% (95% CI: 8.0, 10.2) of all respondents had been subjected to childhood injuries and trauma with no significant differences in the response between different groups. The average number of days (in the past 30 days) that the respondent's *mental health* was not good was higher (6.3 vs. 2.8: p value <0.001) among the respondents who had experienced injury or trauma during their childhood compared to those who had not. Similarly, the average number of days (in the past 30 days) that the respondent's physical health was not good was higher (5.7 vs. 2.7: p value <0.001) among the respondents who had experienced injury or trauma during their childhood compared to those who had not.

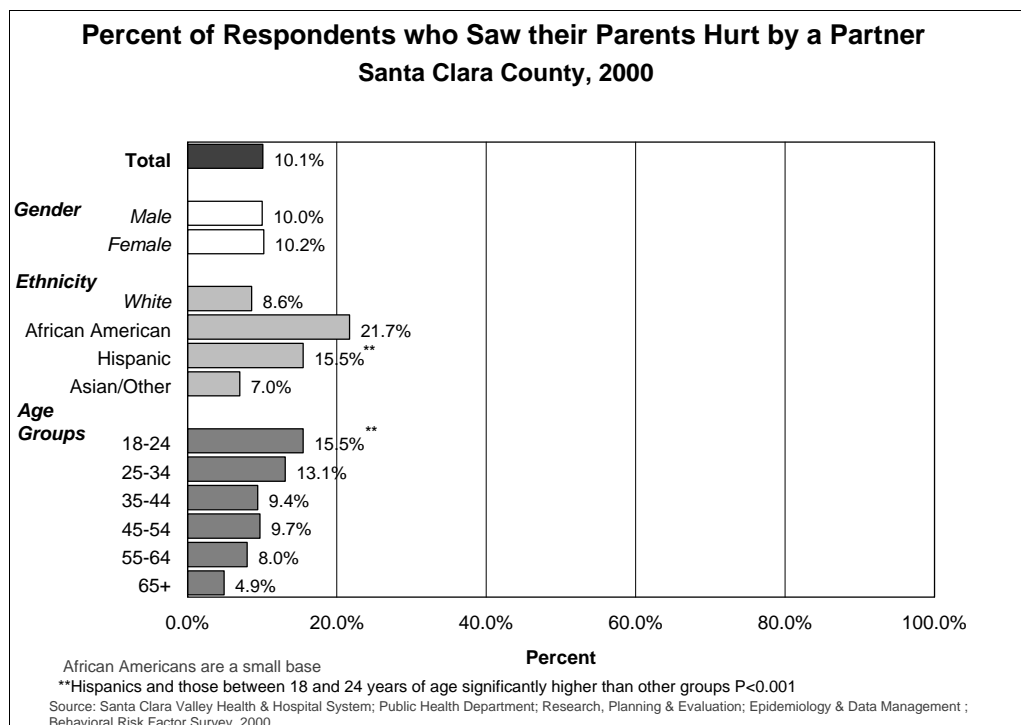
Marital status and perception of health were affected by respondent's history of abuse. Those who were abused as a child were nearly twice as likely not to be married as an adult (OR=1.8, 95%CI: 1.4, 2.4) than those were not abused (Chi Square test; p <0.0001).

**Figure 7**



Those who were abused were twice (OR=2.0, 95%CI: 1.4, 2.9) as likely to perceive their health status as fair or poor as opposed to those who were not abused as a child. (Chi Square test;  $p=0.0001$ ). Additionally, those who reported being abused were more likely (OR=2.2, 95%CI: 1.4, 3.4;  $p=0.0002$ ) to not have a health insurance plan.

**Figure 8**

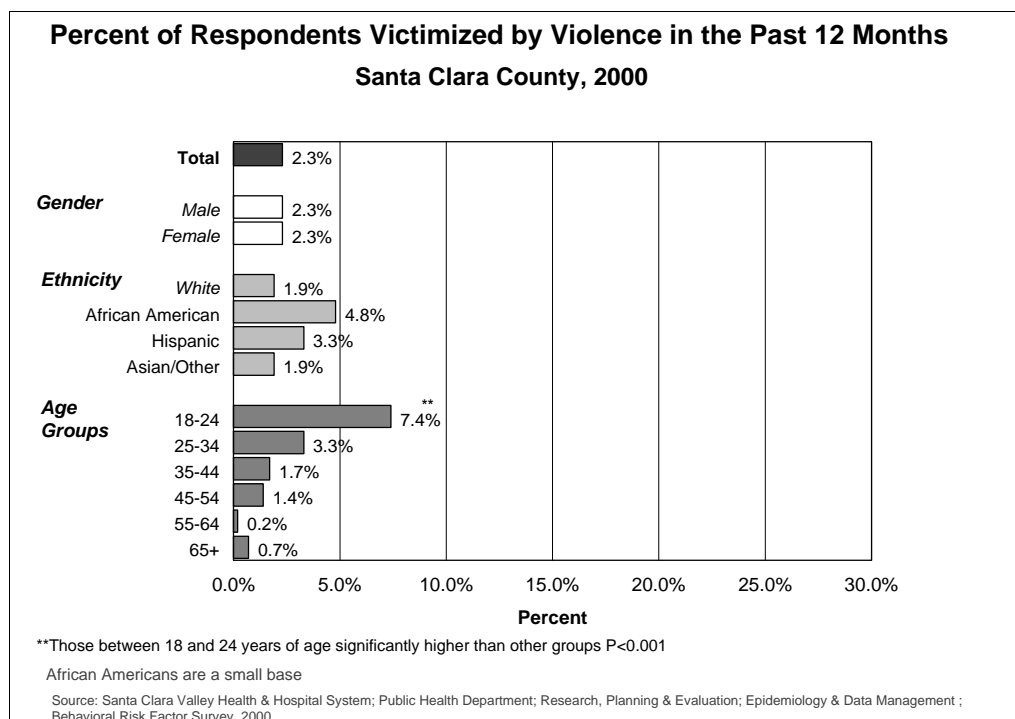


Overall, about 10% (95% CI: 9.0, 11.3) of the respondents saw or heard one of their parents physically hurt by their partner, as seen in Figure 8. Younger adults (18 to 34 years) and Hispanics were more likely to report this compared with other respective age and ethnic groups ( $p<0.001$ ). The average number of days (in the past 30 days) that the respondents' mental health was not good was higher (6.3 vs. 2.8;  $p$  value  $<0.001$ ) among the respondents who had seen or heard one of their parents hurt by their partner during their childhood compared to those who had not. Additionally, the average number of days (in the past 30 days) that the respondents' physical health was not good was higher (4.5 vs. 2.8;  $p$  value  $<0.001$ ) among those who had seen or heard their parents hurt during their childhood compared to those who had not.

Again, marital status and perception of health were affected by such an experience: individuals who had heard one of their parents physically hurt by their partner were two times (OR=2.0; 95% CI: 1.5, 2.6) as likely not to be married than those who did not experience this in their childhood and were nearly twice (OR=1.8, 95%CI: 1.3, 2.6) as likely to perceive their health status as fair or poor to those who did not witness such abuse as a child. Additionally, these respondents were more likely (OR=2.2, 95%CI: 1.5, 3.3;  $p=0.0001$ ) to not have a health insurance plan.

In the past 12 months, 2.3% (95% CI: 1.7, 2.9) of the respondents had experienced some form of violence (Figure 9). A higher proportion (7.4%; 95% CI: 4.4, 10.5) of young adults between 18 to 24 years old reported to have experienced violence as compared to the other age groups. The average number of days (in the past 30 days) that respondent's *mental health* was not good was higher (8.9 vs. 3.1:  $p < 0.0001$ ) among the respondents who had experienced violence in the past 12 months compared to those who did not. Similarly, the average number of days (in the past 30 days) that the respondent's *physical health* was not good was higher (6.4 vs. 2.9:  $p$  value=0.003) among the respondents who had experienced violence in the past 12 months.

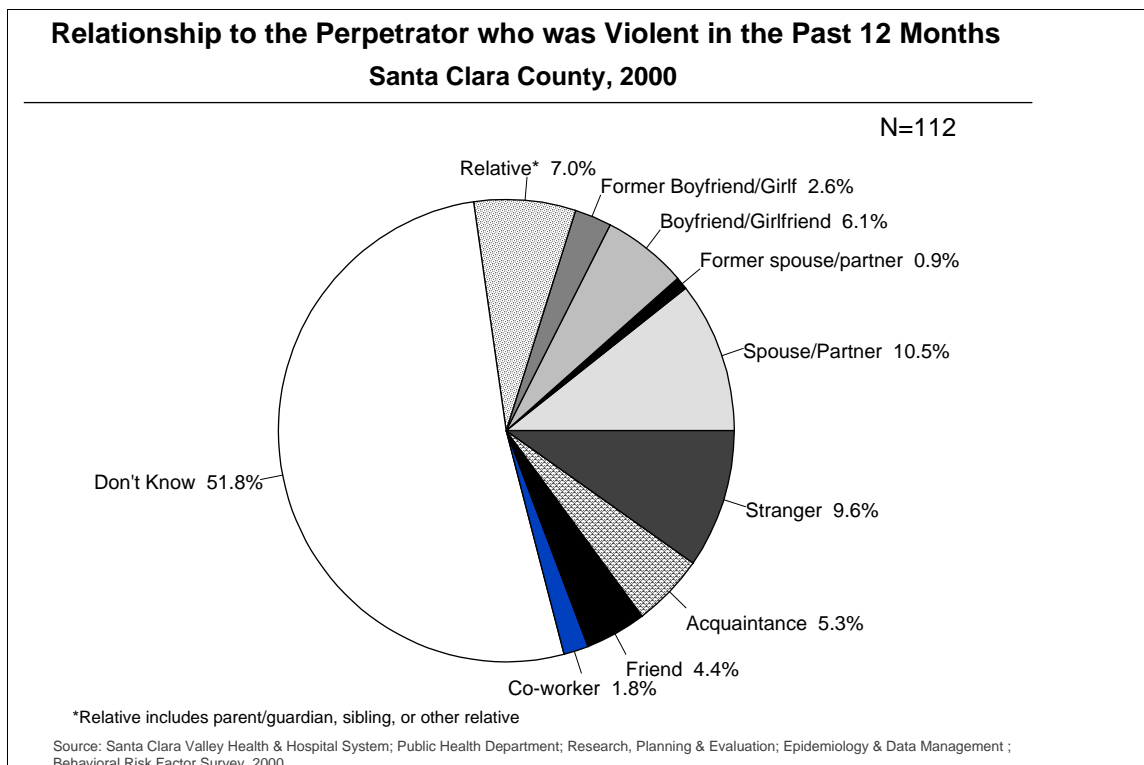
**Figure 9**



Perception of health was not different between respondents who experienced violence and those who did not. Those who experienced violence were 2.5 (OR=2.5; 95% CI: 1.2, 5.2) times more likely to have less than a high school education than those who did not experience violence. Additionally, they were four (OR=4.4; 95% CI: 2.4, 8.4) times more likely to not be married. Although the proportion of men and women who experienced violence in the last 12 months were equal, marital and educational status were significantly correlated only among women ( $p=0.008$  and  $p=0.01$  respectively) who experienced violence. Those who experienced violence were also more likely (OR= 2.8, 95% CI: 1.4, 5.8;  $p=0.005$ ) to not have a health plan and have a household income of less than \$15,000 (OR=3.3, 95% CI: 1.6, 7.1;  $p=0.002$ ). On the same note, they were also more likely to be under the 100% Federal Poverty Level (OR= 3.4, 95% CI: 1.7, 6.5;  $p=0.0002$ ) (data not graphed).

Women who were not married were more (OR=2.7, 95%CI: 1.2, 6.2) likely to report violence in the past 12 months than those who were married ( $p=0.003$ ). Additionally, women who were victims of violence were more likely to have a household income of less than the median income (\$50,000 to \$75,000) in the county ( $p=0.05$ ) (data not graphed).

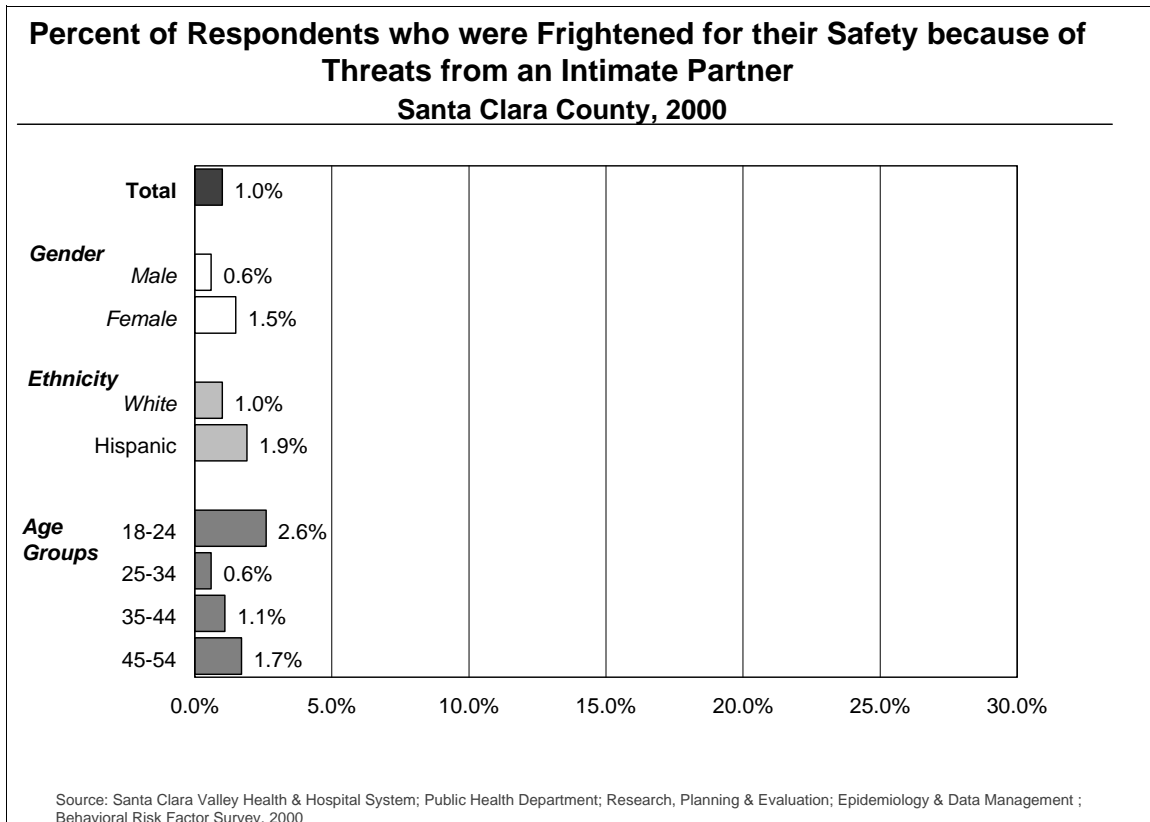
**Figure 10**



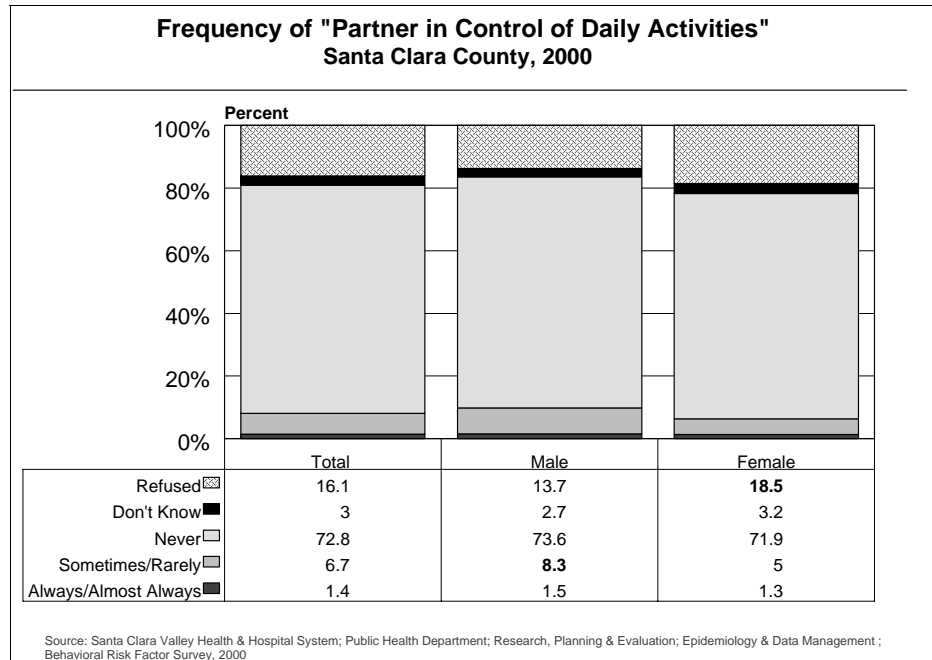
A majority (77%) of the respondents who reported to have been a victim of violence in the past 12 months refused to divulge their relationship to the perpetrator. Of those who reported to be victimized, however, a variety of relationships with the perpetrators were observed as pictured in the pie chart above (Figure 10). A small percentage (1.3%, 95%CI: 0.3, 2.2) of those who were involved in a violent act were forced to take part in a sexual activity; a majority of these victims were women.

Approximately 1% or 27 respondents feared for their safety or the safety of their loved ones because of anger or threats made by an intimate partner (95% CI: 0.7, 1.5) (Figure 11).

**Figure 11**

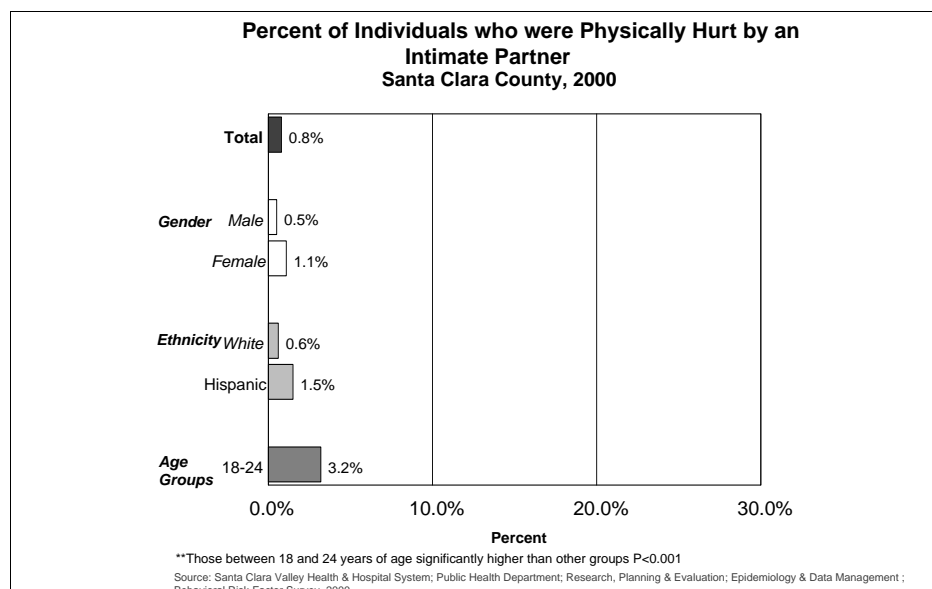


**Figure 12**



About 1.4% (95% CI: 1.0, 1.9) of all respondents felt like their intimate partner tried to control all or most of their activities, as depicted in Figure 12. A significantly higher proportion of men replied "Rarely" to this question compared to women.

**Figure 13**



In the past 12 months, less than 1% of respondents reported being physically hurt by their intimate partner and only 0.5% sought medical care as a result of their intimate partners' violent behavior (Figure 13). About 3.2% (95% CI: 1.1, 5.3) of younger individuals between 18 and 24 years of age reported that they were physically hurt in the past 12 months and were 6 times (OR=6.6; 95%CI: 2.5,17.5) more likely to report being physically hurt than other age groups ( $p < 0.0001$ ). More women reported being physically hurt by an intimate partner than men, although, 19.2% of women refused to answer this question.

Among those who reported being physically hurt, only 20% (95% CI: 2.5, 37.5) sought medical attention as a result of their intimate partners' violent behavior. Furthermore, those who were hurt by their intimate partner were more likely (OR=3.7, 95%CI: 1.2, 11.0;  $p=0.02$ ) not to have a health insurance plan (data not graphed).

A summary of responses to questions in this section is outlined in Table 2 below:

### Summary of Responses to Intimate Partner Violence Questions

**Table 2**

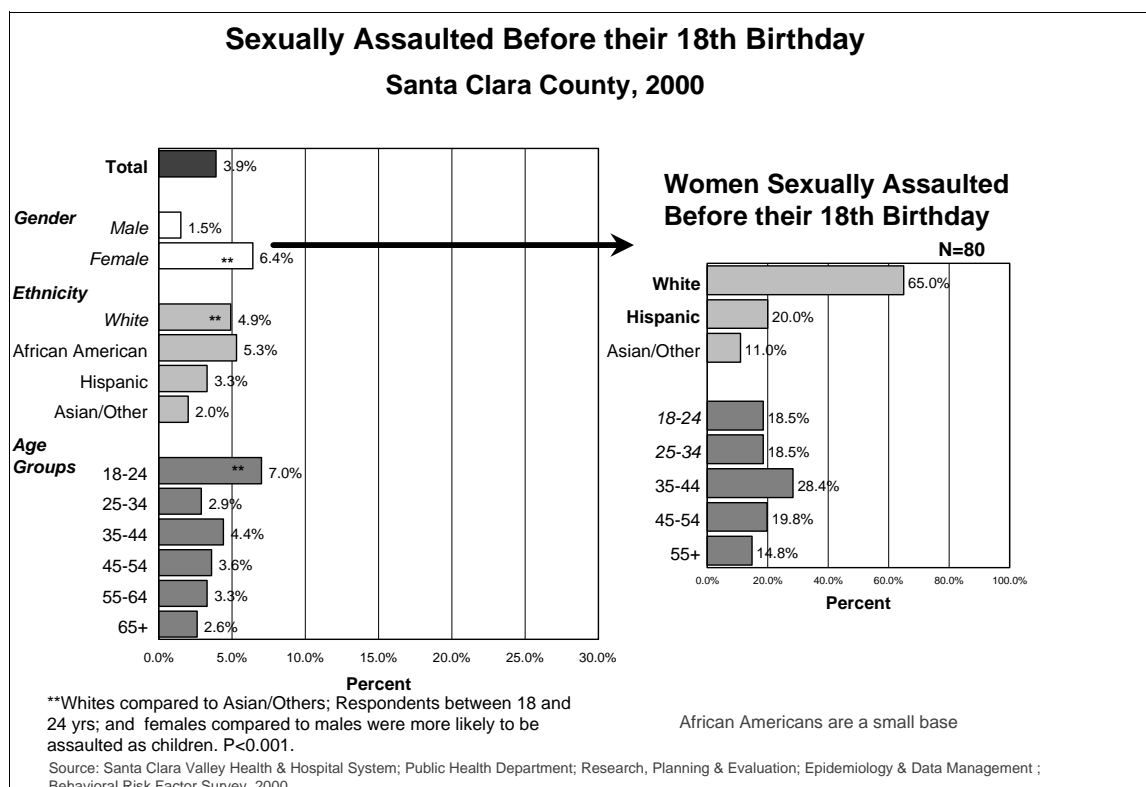
Experience with violent behavior					Co-related Factors*				
	Question	Base Total	Yes (N)	Percent (%)	Mental Health	Physical Health	Perception of Health	Education	Marital Status
1	Injured or hurt due to abuse as a child	2547	231	9.1	p<0.001	p<0.001	p=0.0001	NS	p<0.001
	Male	1289	118	9.2					
	Female	1258	113	9					
2	See or hear parents hurt by their partner	2547	258	10.1	P<0.001	P<0.001	P=0.001	NS	P<0.001
	Male	1289	129	10					
	Female	1258	128	10.2					
3	Violence in the past 12 months	2547	58	2.3	P<0.001	P=0.003	NS	p=0.02	P<0.001
	Male	1289	29	2.3					
	Female	1258	29	2.3				p=0.01	P=0.008
4	Did violence lead to sexual activity	487	7		NS	NS	NS	NS	NS
	Male	222	1						
	Female	266	6						
5	Frightened because of threats from intimate partner	2547	27	1	P=0.001	P=0.001	NS	NS	NS
	Male	1289	8	0.6					
	Female	1258	19	1.5					
6	Physically hurt by an intimate partner-past 12 months?	2547	20	0.8	P<0.001	P<0.001	NS	NS	P=0.003
	Male	1289	7	0.5					
	Female	1258	14	1.1					
7	See a healthcare provider in the past 12 months because of this?	2547	12	0.5	P<0.001	P<0.001	NS*	NS	NS
	Male	1289	3						
	Female	1258	9						

**Notes:** Mental and physical health were defined as average number of self-reported days that respondents did not feel well. The Mann-Whitney T-test was used to see significance of differences in means of such number of unwell days. Perception of health was defined as health status being poor or as being good/excellent. Marital status was defined as those who were not married to those who were married and educational status as less than a high school education or not.



## Data Analysis of BRFs Responses for Sexual Assault

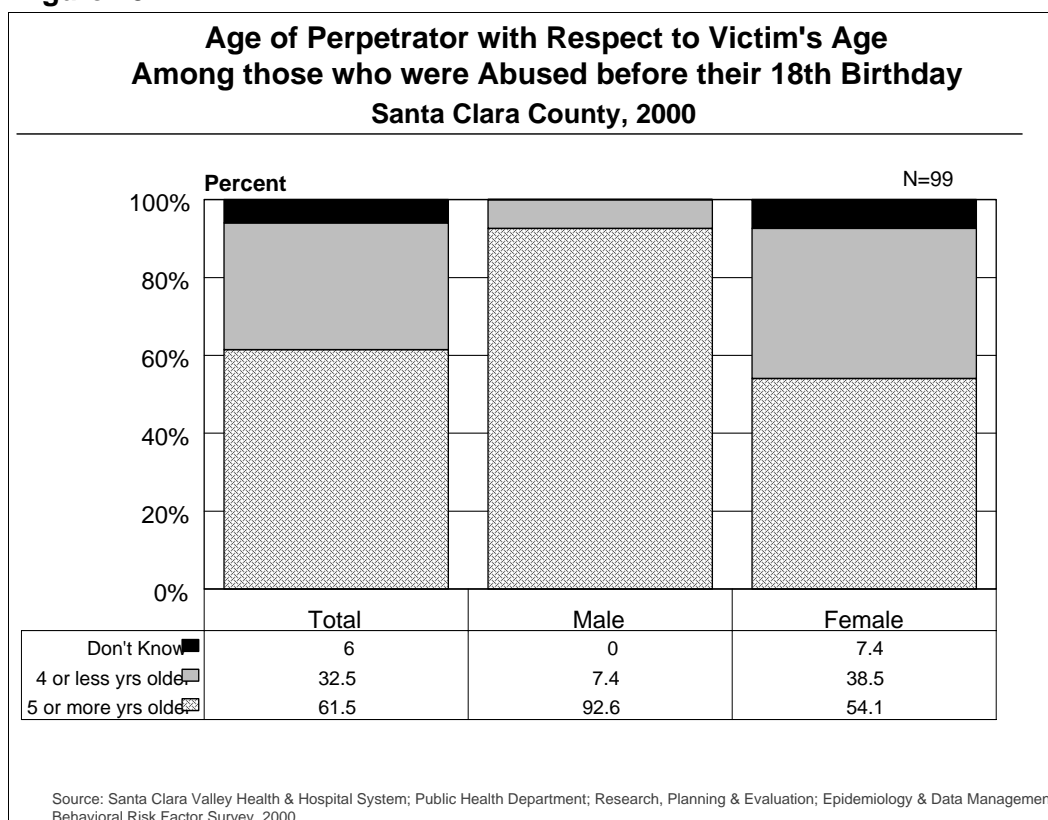
Figure 14



Nearly 4% of respondents (3.9%, 95% CI: 3.1, 4.6) reported to have been forced to have sex before their 18<sup>th</sup> birthday (see Figure 14). Higher proportions of women (6.4%, 95% CI: 5.0, 7.7), young adults 18 to 24 years (7%, 95% CI: 4.1, 10.1; p=0.003), and Whites (4.9%, 95% CI: 3.8, 6.1) reported being sexually assaulted when they were less than 18 years of age. Of those who reported being sexually abused prior to turning 18, the average number of days that they did not feel physically and mentally well was higher than those who were not abused before 18 years of age (p<0.0001). Those who were hurt as a child (Figure 7) were five times (OR= 5.0, 95% CI: 3.2, 8.0; p<0.0001) more likely to have been forced to have sex before their 18<sup>th</sup> birthday. Further descriptive analysis on victims of this subset revealed that 92% were women, 73% were white, and 78% were between 35 and 65 years old (data not graphed).

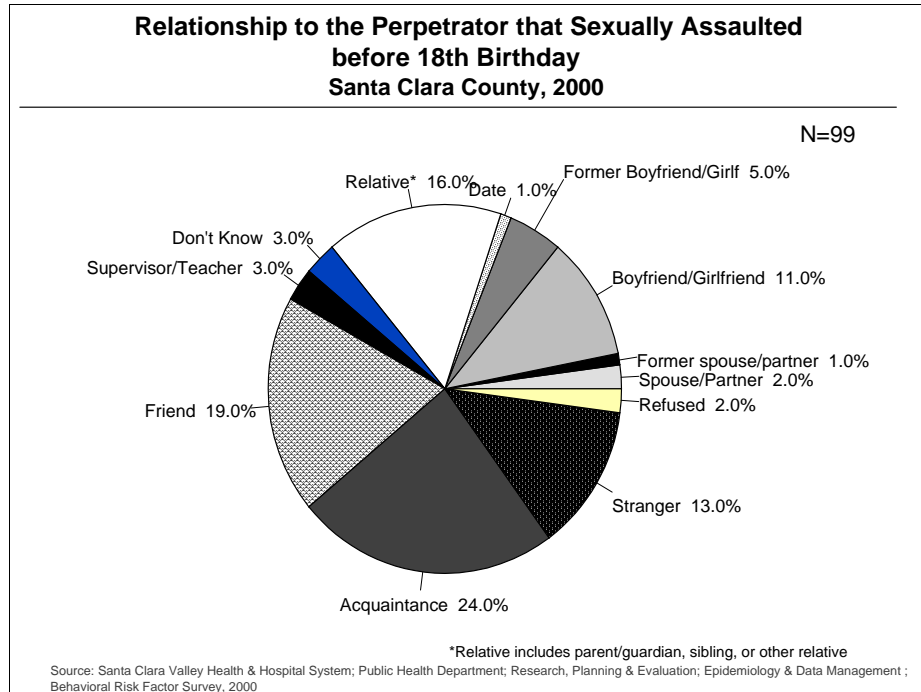
Among women who were sexually abused as a child (before their 18<sup>th</sup> birthday), about 65% were White, 65% were younger than 44 years old, and had significantly higher average number of days of feeling both physically and mentally unwell than women who were not abused (Figure 14). Marital status and perception of health were not significantly associated with being sexually assaulted as a child. White women who were abused were less likely (borderline significance) to be married than white women who were not abused (OR: 1.88, 95% CI: 1.0, 3.5);  $p=0.05$ . Additionally, White women who were abused were more likely to perceive their health as “poor/fair” as compared to white women not abused as a child (OR=2.9, 95% CI: 1.3, 6.5);  $p=0.008$ . The average number of days of feeling physically and mentally ill was also higher among white women who were sexually abused than white women who were not (Refer to Table 3 on page 238).

**Figure 15**



Almost 62% (95% CI: 52, 71.2) of those who were forced to have sex before their 18<sup>th</sup> birthday were abused by someone five or more years older than them. Although, more women were abused (N=43) than men (N=18) (Figure 15), the disparity in the age of the perpetrator for men and women was quite apparent. While 54.1% (95% CI: 42.8, 64.7) of the women who were sexually assaulted were abused by someone five or more years older than them, almost all (92.6%; 95% CI: 84.7, 104.8) of the men who were abused by someone five or more years older than them.

**Figure 16**



Of those who reported being sexually abused as a child, a majority of the relationships to the perpetrator were: Acquaintance (24%), friend (19%), stranger (13%), relative (16%), and boyfriend/girlfriend (11%) (Figure 16).

**Figure 17**

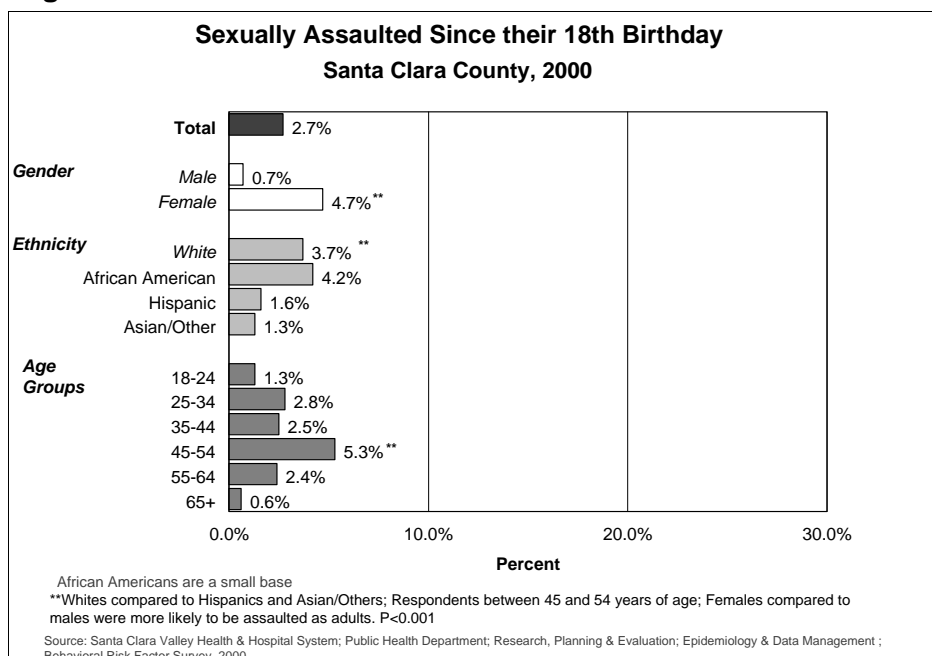
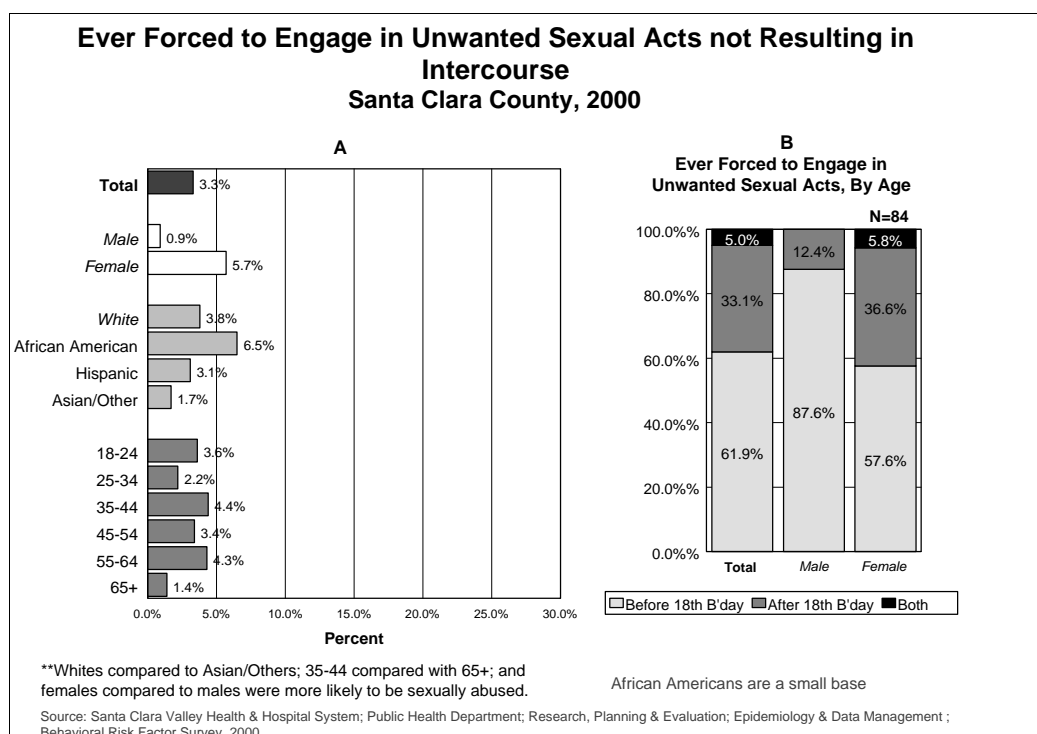


Figure 17 shows that about 2.7% (95%CI: 2.1, 3.3) of respondents reported that they were forced to have sex as an adult (since their 18<sup>th</sup> birthday). This translates to about 35,000 persons in Santa Clara County. A higher proportion of females (4.7%; 95% CI: 3.5, 5.9) reported being forced to have sex as compared to males. Whites (3.7%, 95% CI: 2.7, 4.7) and middle age adults between 45 and 54 years old (5.3%; 95%CI: 3.3, 7.3) were also more likely to have been forced to have sex since their 18<sup>th</sup> birthday than their respective counterparts. Less than 1% of respondents (0.6%, 95%CI: 0.1, 1.1) reported being forced to have sex in the past 12 months.

As observed among victims who were sexually assaulted before their 18<sup>th</sup> birthday, those who were also physically hurt as a child (Figure 7) were more likely to be forced to have sex as an adult (OR= 4.5, 95% CI: 2.6, 7.8;  $p<0.001$ ). Additionally, the average number of days respondents did not feel physically well was higher for those who were not assaulted ( $p=0.006$ ). Other factors were not significantly related.

**Figure 18**

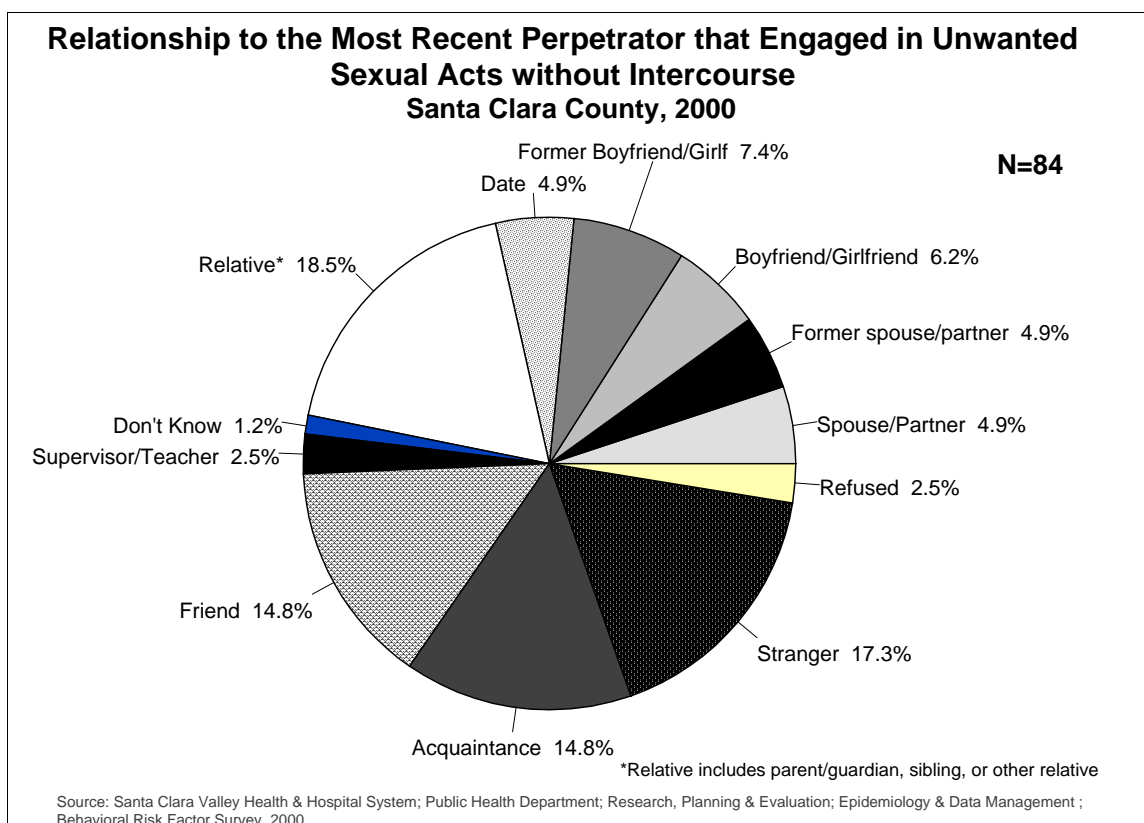


As illustrated in Figure 18A, about 3.3% (95% CI: 2.6-4.0) of the survey respondents were forced to engage in a sexual activity that did not necessarily involve intercourse. Roughly 5.7% (95% CI: 4.4, 7.0) of women compared to 0.9% (95% CI: 0.4, 1.5) of men were coerced to participate in such sexual acts. Those who experienced these acts were more likely to have higher average number of days of feeling mentally and physically ill ( $p<0.001$ ). This was more significant among women.

Of the 84 individuals who reported being forced in a sexual activity that did not necessarily involve intercourse, almost 62% (95% CI: 51.3, 72.3) acknowledged that the experience happened before their 18<sup>th</sup> birthday. Approximately 87.6% (95% CI: 62.2, 104.4) of men compared to 57.6% (95% CI: 45.5, 68.4) of women admitted that the experience took place before their 18<sup>th</sup> birthday (Figure 18B).

The relationship to the most recent abuser varied from stranger (17.3%), a relative (18.5%), friend (14.8%), acquaintance (17.3%), to a former boyfriend/girlfriend (7.4%) as delineated in the pie chart (Figure 19).

**Figure 19**



A summary of the questions in this section and their responses for males and females is outlined in Table 3 below:

**Table 3**  
**Summary of Responses to Sexual Assault Questions**

	Sexual Abuse				Co-related Factors*			
	Question	Base Total	Yes (N)	Percent (%)	Mental Health	Physical Health	Perception of Health	Marital Status
1	Forced to have sex since 18th birthday	2547	69	2.7	p=0.006	NS	NS	NS
	Male	1289	9	0.7				
	Female	1252	59	4.7				
2	Forced to have sex in the past 12 months	268	5		NS	NS	NS	NA
	Male	383	<5					
	Female	484	<5					
3	Forced to have sex before 18th birthday	2547	99	3.9	P<0.001	P<0.001	NS	NS
	Male	1289	19	1.5				
	Female	1258	80	6.4	P<0.001	P=0.001		NS
	White (among women)			65	P<0.001	P<0.001	P=0.008	P=0.05
4	Sexual Abuse before 18th birthday by someone five or more years older than you?	99	61	61.5	NS	NS	NS	NS
	Male	19	18	92.6				
	Female	80	43	54.1				
5	Been forced to engage in any sexual activity that did not involve intercourse	2547	84	3.3	P<0.001	P<0.001	NS	P=0.08
	Male	1289	12	0.9				
	Female	1258	72	5.7	P<0.001	NS	NS	NS
6	Occur before 18th birthday?	84	52	61.9	NS	NS	NS	NS
	Male	12	10	87.6				
	Female	72	41	57.6				

**Notes:** Mental and physical health were defined as average number of self-reported days that respondents did not feel well. The Mann-Whitney T-test was used to see significance of differences in means of such number of unwell days. Perception of health was defined as health status being poor or as being good/excellent. Marital status was defined as those who were not married to those who were married or not.

### **Summary of Key Findings for Intimate Partner Violence (IPV) and Sexual Assault**

Overall, 9.1% of respondents were subject to injury or trauma as a child, 10% witnessed a parent being physically abused by an intimate partner, and 2.3% experienced some form of violence. Furthermore, 4% of respondents reported being sexually abused prior to turning 18 years of age and 2.7% were sexually assaulted as adults. Although violence and abuse affects people of all ages, genders, race/ethnicity, and socioeconomic status, more women and Whites reported being victims of sexual assault than other subgroups. Additionally, more young adults (18 to 24 years old) reported being sexually abused prior to their 18<sup>th</sup> birthday, whereas more adults 45 to 54 years old were sexually abused as adults.

Regardless of experiencing physical or sexual abuse as a child or during adult years, victims were more likely to feel mentally and physically ill more often, have a “fair or poor” perception of health, less likely to be married, and in one case have less than a high school education or have lower income than respondents who were not sexually or physically abused.

The data from this survey indicate that a majority (85-90%) of those who were assaulted had a high school and/or college education or higher. There were no significant differences between men and women in this regard. Sexual assault was more prevalent among adult females as compared to adult males. However, a higher proportion of males were sexually assaulted before their 18<sup>th</sup> birthday than females, and most were assaulted by someone who was 5 or more years older than them.

Although this survey gives us a good overview and baseline information on the behavioral characteristics and prevalence of violence and sexual assault for the first time in Santa Clara County, further studies with larger sample size are needed for better accuracy of data. Additionally, more in depth questions, such as the number of assaults, and immediate and chronic physical and mental health issues, need to be ascertained and potentially linked to events (i.e. emergency department visits or to primary care physicians) to better characterize violence among intimate partners.

## personal injury prevention

The risk of everyday personal and unintentional injury is often high, yet the topic is not given the level of attention it deserves due to the erroneous belief that injuries happen by chance and are the result of unpreventable “accidents.” However, many injuries are not “accidents,” or random, uncontrollable acts of fate; rather, most injuries are predictable and preventable (Houk, Brown, and Rosenberg, 1987, as cited by DHHS, 2000).

Unintentional injuries are the fifth leading cause of death in the United States, exceeded only by heart disease, cancer, stroke, and chronic obstructive pulmonary diseases (CDC National Center for Health Statistics, 2000). Moreover, unintentional injuries, predominantly caused by motor vehicle collisions, continue to be the leading cause of death among people age 1 to 34 years of age. Nonfatal injuries also affect millions of people in the U.S., resulting in 20.5 million disabling injuries annually. In 1997, motor vehicle collisions (including bicycle-related collisions) made up 45.4% of unintentional injury deaths, and fires caused 3.8% of deaths. Unintentional injuries and deaths can be significantly reduced with preventive practices and behaviors, such as using seat belts and bicycle helmets, and having household fire alarms that are checked regularly.

### Seat Belt Use

Although California is the first state in the nation to reach nearly 90% (88.9%) compliance for seat belt use (National Highway Traffic Safety Administration, 2000), the prevalence of injuries and fatalities caused by motor vehicle collisions could be reduced even further. During 2000, California had a total of 511,248 traffic collisions, of which 3,331 resulted in fatalities and 198,348 resulted in injuries (California Highway Patrol, SWITRS, 2000). Furthermore, almost half of vehicle occupants killed in a traffic collision in the state and in Santa Clara County did not use a seat belt.

According to the California Department of Motor Vehicles (2000), wearing a lap seat belt only when driving doubles the chances of living through a traffic collision than not wearing a seat belt. Moreover, wearing a lap and shoulder seat belt improves the chances of surviving a traffic collision three or four times more than not wearing a seat belt. It is important to note that although seat belt use saves lives, they are specifically created to fit adult passengers. Vehicle passengers who weigh less than 60 pounds or are six years and younger are required to use seat belts along with their car or booster seats.



### Bicycle Helmets

Since 1994, California's law required that children and adolescents younger than 18 years of age wear a helmet when riding a bicycle. California is currently 1 of 20 states that has an existing Bicycle Helmet Law (Bicycle Helmet Safety Institute, 2002). Although bicycle collisions also injure and kill adults, current laws focus on children since this age group rides about 50% more than the average bicyclist, and accounts for approximately 21% of all bicycle-related deaths and more than 54% of all bicycle-related injuries (National SAFE KIDS Campaign, n.d.).

According to the National SAFE KIDS Campaign, bicycles are associated with more childhood injuries than any other consumer product except the automobile. National statistics show that 173 children ages 14 and under died in bicycle-related crashes in 1999 and more than 373,000 children ages 14 and under were treated in hospital emergency rooms for bicycle-related injuries in 2000. A new SAFE KIDS study in 2002 identified that nearly half (47%) of children hospitalized for bicycle-related injuries in the U. S. suffer from a traumatic brain injury. In fact, head injuries account for more than 60% of bicycle-related deaths, more than two-thirds of bicycle-related hospital admissions and about one-third of hospital emergency room visits for bicycling injuries.

In Santa Clara County, children age 10 to 14 years represented the largest number of bicycle injuries and fatalities at 15.6% of the total bicycle-related collisions in 1997. Helmet usage was alarmingly low among school-aged children. Approximately 45.1% of students (grades 7-8) in SCC reported "rarely or never" wearing bicycle helmets. Hispanic, African American, and Asian/Pacific Islander students reported the highest incidences of non-helmet use, ranging from 85.8% and 78.1% (SCC Public Health Department, 1997).

Increasing the rates of helmet usage would almost certainly reduce the prevalence of traumatic brain injuries caused by bicycle collisions. The National SAFE KIDS Campaign (2002) adds that the single most effective safety device available to reduce head injury and death from bicycle crashes is a helmet, which when used properly, reduces the risk of bicycle-related death, injury, and the severity of a head injury when a crash occurs by as much as 88%.

**Smoke Detectors**

Overall, the United States has the third highest death rate due to fires among all industrialized countries (International Association for the Study of Insurance Economics, 2000, as cited by the CDC, 2001). Of particular interest are residential fires, which cause the most fire-related fatalities. In 1999, approximately 383,000 residential fires accounted for 2,895 deaths and 16,425 injuries in the U.S., and claimed more than \$5 billion in direct property damage. MJ Karter, from the National Fire Protection Association (2000, as cited by CDC, 2001) estimated that a person in the U.S. died in a fire every two and a half hours, and another was injured every 24 minutes.

Smoke alarms are reported to cut the chances of dying in a house fire by 40 to 50% (CDC, 2001). However, about a quarter of U.S. households do not have working smoke alarms. Functioning smoke alarms on every level and in every sleeping area of a home can provide residents with sufficient warning to escape from nearly all types of fires and increase the likelihood of preventing fire-related deaths (DHHS, 2000). Hence, it is important that all households not only have at least one smoke alarm in the home, but residents should also occasionally test the smoke alarms for accurate operation.

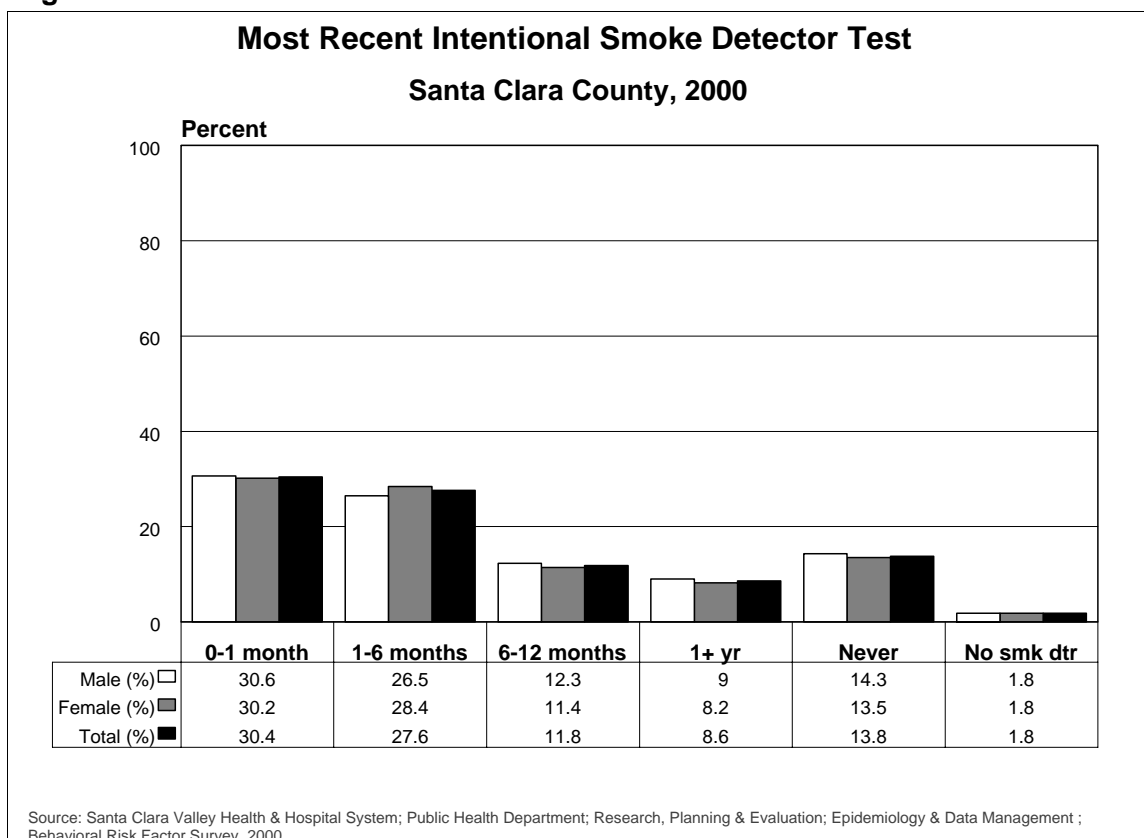
**Healthy People 2010 Objectives: Personal Injury Prevention**

Objectives		Target
1-3e	Increase the proportion of persons appropriately counseled about childhood injury prevention: vehicle restraints and bicycle helmets (children age 17 years and under)	Developmental
15-19	Increase use of safety belts	92%
15-23	Increase use of helmets by bicyclists	Developmental
15-24	Increase the number of States and the District of Columbia with laws requiring bicycle helmets for bicycle riders	All States and the District of Columbia
15-26	Increase functioning residential smoke alarms	
a	Total population living in residences with functioning smoke alarm on every floor	100%
b	Residences with a functioning smoke alarm on every floor	100%

## Data Analysis of BRFs Responses for Personal Injury Prevention

## Use of Smoke Detectors

Figure 1

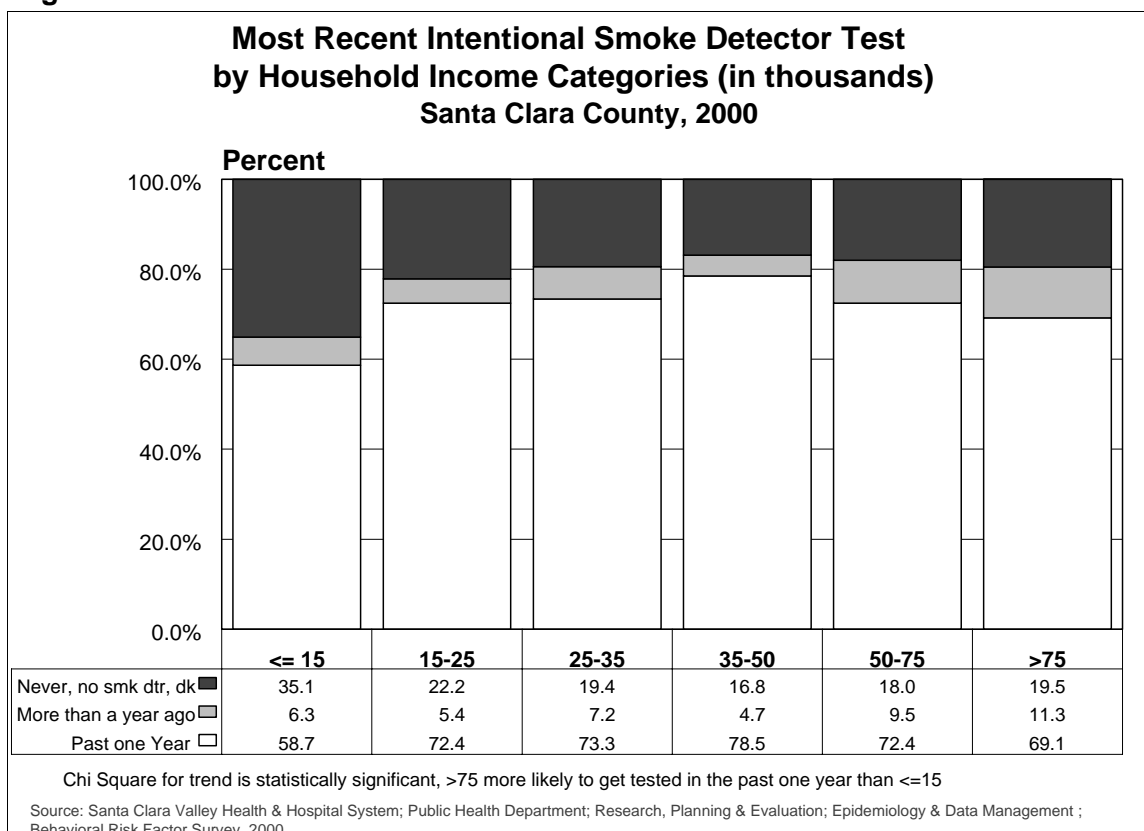


Overall, 30.4% of respondents reported getting their smoke detectors tested for proper operation within the past one month, followed by 27.6 % of respondents getting smoke detectors tested within the past 6 months. Approximately 11.8% replied getting smoke detectors tested between and 6 and 12 months and 8.6% replied getting them tested more than a year ago. Approximately 13.8% never tested their smoke detectors, whereas 1.8 % admitted to not having a smoke detector in their house.

By far, more Whites (75.2% versus other ethnic groups) and adults age 35 to 44 years of age (72.9% versus other age groups) reported having had their smoke detectors tested at some point in the past year than their respective counterparts. Additionally, more Hispanics reported having their smoke detectors tested in the past month than other ethnic groups. More Asian/others and younger adults (age 18 to 34 years) reported never having their smoke detectors tested for proper operation. There were no differences in the responses between genders (data not shown).

Routine testing of smoke detectors was correlated with respondents' income levels. Respondents with higher income levels were more likely to have a smoke detector in their homes and routinely test them within the past year than respondents with lower incomes. Approximately 35% of respondents whose annual income was less than \$15,000 reported either never testing their smoke detectors, were not sure if the smoke detectors were even tested, or did not have a smoke detector in their homes (Figure 2).

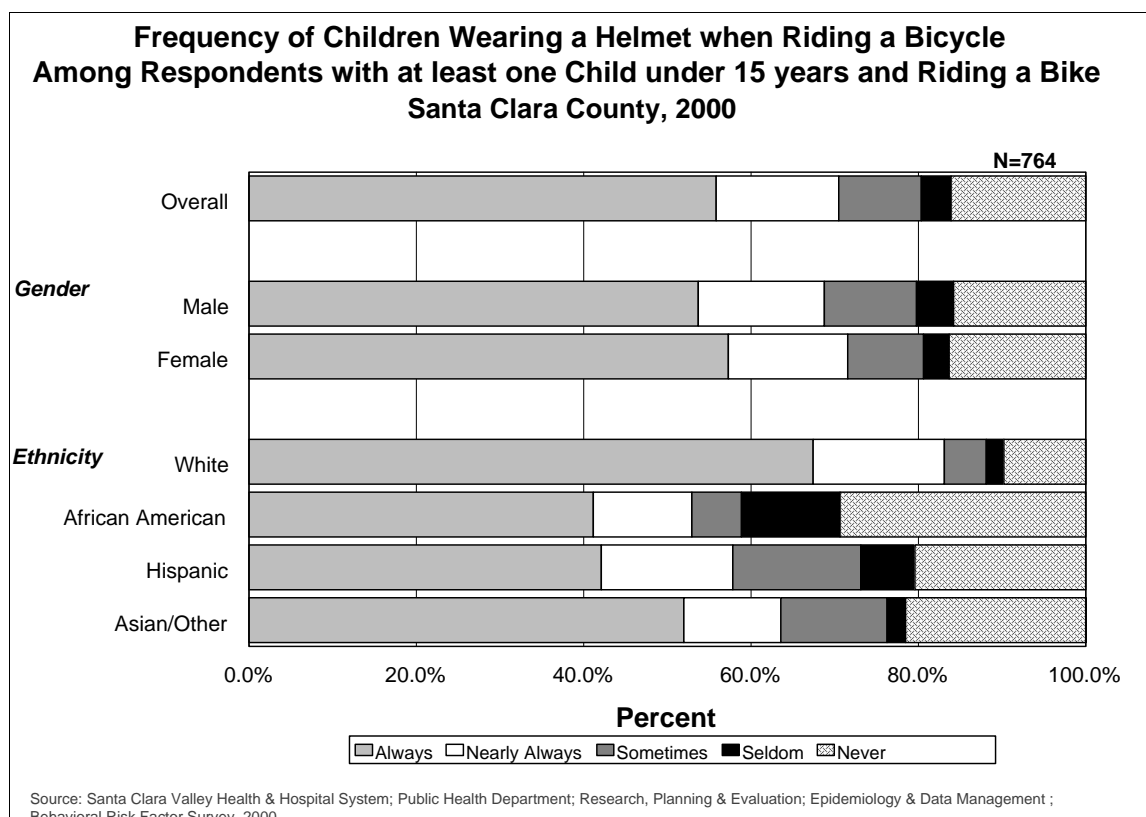
**Figure 2**



Respondents' educational status was also correlated with the frequency of testing smoke detectors. Those who had less than a high school education (27.9, 95% 21.8, 34.1) were more likely to not have tested their smoke detectors, were not sure if the detectors were tested, or did not have one in their homes as compared to the respondents who had a high school education or more (21%, 95% CI: 19.3, 22.6) (data not graphed).

## Children's Bicycle Helmet Use

Figure 3

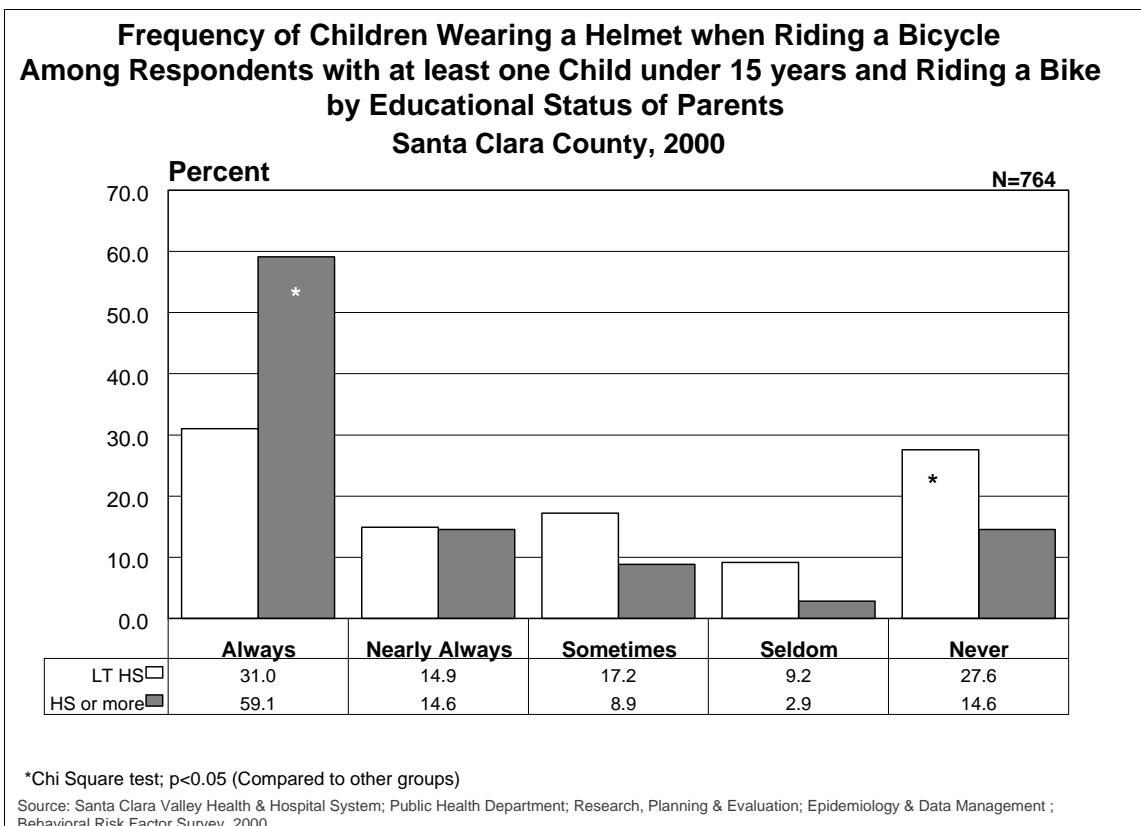


Of the respondents with children between the ages of 1 and 15 who rode bicycles, 55.8% reported that their children always used a helmet when riding a bicycle. Approximately 15.8% admitted that their child never used a helmet. Other responses included "Nearly Always," (14.4%), "Sometimes," (9.7%) and "Seldom," (3.7%).

A higher proportion of Whites (67.5%) reported that their children always used a helmet when riding a bicycle, followed by Asian/others (51.9%) and Hispanics (42.1%) (Figure 3). A higher proportion of older parents also reported that their children always wore a helmet when riding a bicycle than their younger counterparts (data not shown).

Parents who at least had a high school education reported higher proportions of their children using helmets when riding a bicycle compared to parents with less than a high school education (Figure 4).

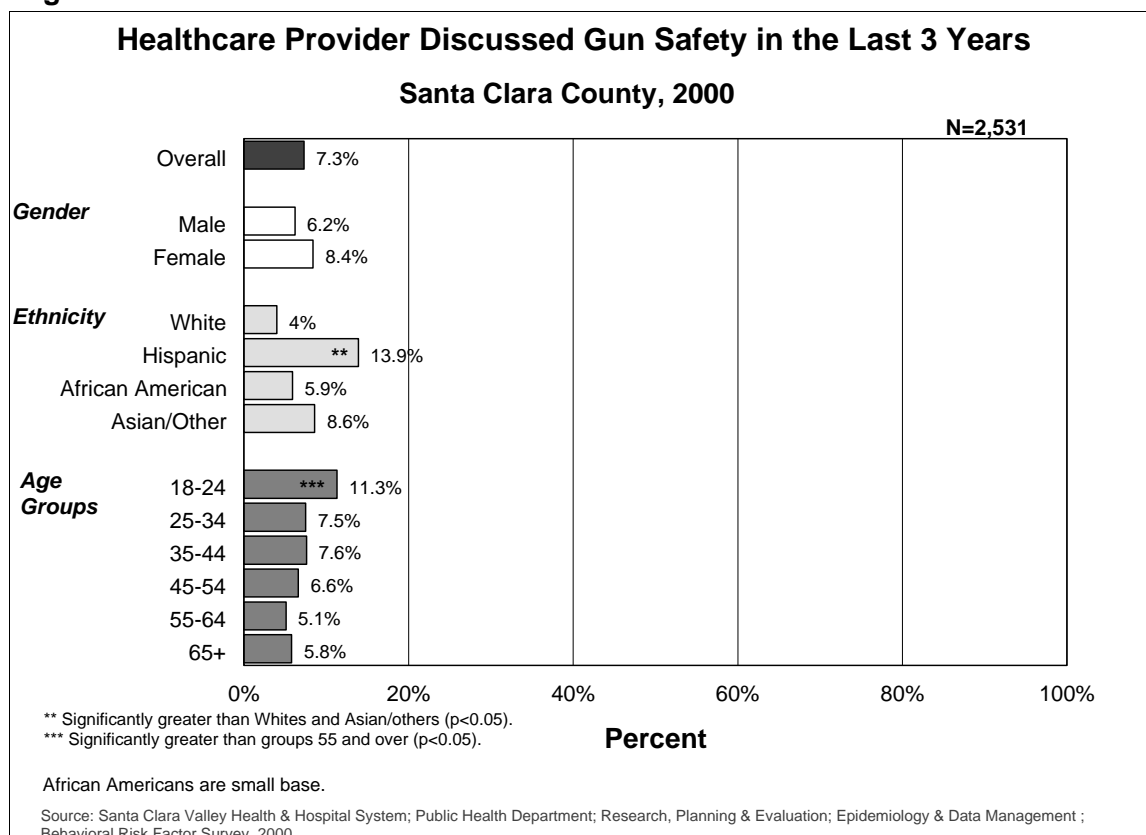
**Figure 4**



Parents who were out of work or were students were 2.4 times (95% CI: 1.4-4.2) more likely to report children who never or seldom wore helmets compared to those who were employed (Data not graphed). Furthermore, as household income increased, the proportion of children always using helmets also increased (data not shown).

## Safety Belt Use, Bicycle Helmet Use, or Use of Smoke Detectors

Figure 5



Overall 15.6% of respondents said that a healthcare provider had discussed the importance of using safety belts, helmets, or smoke detectors with them in the past 3 years, as illustrated in Figure 5. A higher proportion of Hispanics (31%) reported receiving preventive education on the use of safety belts, helmets, or smoke detectors, followed by Asian/others and African Americans. Whites had the lowest prevalence of having discussed these preventive measures with a healthcare provider. A Higher proportion of younger adults (21.1%) also reported receiving education on safety belts, helmets, and smoke detectors, with the frequency of education somewhat decreasing as age increased.

Further analysis revealed that women age 25 to 34 years (23.3%) were more likely to report receiving education on the use of seat belts, helmets, and smoke detectors than men in the same age group (11.9%). Hispanics in younger age groups also received more education on these preventive measures in the past 3 years than older Hispanics. Conversely, Asian/others age 45 to 54 years old (9.6%) received less preventive education than older Asian/others age 55 to 64 years old (25.9%). Hispanics and Asian/others in the 55 to 64 age group responded similarly (data not graphed).

### Summary of Key Findings for Personal Injury Prevention

Although unintentional injuries are one of the leading causes of death and the number one cause of death for people age 1 to 34 years in the U.S., they are considerably predictable and preventable. Practices, such as using seat belts when riding in a motor vehicle, wearing bicycle helmets when riding a bicycle, and having household smoke alarms that are routinely checked for proper functioning, can significantly reduce deaths and injuries.

Although almost 60% of respondents said that they tested their residential smoke alarms at least within the past year, a small percentage still reported either not testing their smoke alarms for proper operation or not having one at all. Higher proportions of having smoke alarms and routinely checking their performance were reported among Whites, Hispanics, and respondents 35 to 44 years old, and those who had higher income levels, whereas lowest proportions were reported by Asian/others, those 18 to 34 years old, had less than a high school education, or earned less than \$15,000 annually.

Overall, 55.8% of respondents, predominantly Whites, older parents, and parents with at least a high school education, reported that their children 15 years or younger wore helmets when riding a bicycle. Parents who were students or did not have a job had lower proportions of children wearing bicycle helmets. Although more than half of the respondents' children wore bicycle helmets, further efforts in promoting bicycle helmet use is needed to increase the rate to 100% in order to comply with California's Bicycle Helmet Law, enacted in 1994, requiring all bicycle riders less than 18 years of age to wear a helmet when riding.

Approximately 15.6% of respondents reported receiving information about smoke detectors, bicycle helmets, or seat belts from their healthcare provider. More Hispanics and young adults discussed these preventive practices with their healthcare provider than other respective subgroups.



# IV

## conclusions and recommendations

The second goal of Healthy People 2010 is to eliminate health disparities among segments of the population, including differences that occur by gender, race or ethnicity, education or income, and age. Hence, data presented in this report was used to determine:

- 1) How respondent characteristics and behavioral patterns between groups compared with each other and to relevant Healthy People 2010 objectives and
- 2) The extent of the health problems affected by unhealthy behavioral practices derived not only from personal characteristics but also from inadequate or lack of outreach and services that could lead to unhealthy outcomes and health disparities across different subgroups.

Identified health disparities (or gaps across groups) and priority health topics are presented in the following pages.

Throughout the survey findings, consistent patterns of health disparities were more observed among females, Hispanics, young adults, and respondents who were in the lower income levels.

### **Females**

In general, more females considered themselves to be in poor physical and mental health than males. They had higher prevalence of obesity, thereby contributed to higher proportions of chronic diseases, such as arthritis, asthma, and high blood pressure. Females also reported significantly higher rates of visiting a healthcare provider and were at lower risk for drinking and smoking compared to males.

Although the prevalence of breast cancer (mammograms or clinical breast exams) and cervical cancer (Pap smear test) screening almost met the Healthy People 2010 objectives, birth control use was substantially low among females in Santa Clara County. In addition, only half of females of childbearing age consumed folic acid, which was well below the Healthy People 2010 target of 80%.

Females in this survey were also more subjected to intimate partner violence and sexual assault than males, which may have contributed to reduced physical and emotional well-being and an overall poor perception of health; however, further studies are needed to evaluate these correlations.

### **Hispanics**

Hispanics generally perceived themselves to be in poor physical and mental health. The Hispanic population also suffered higher prevalence of binge and chronic alcohol consumption and tobacco use.

Furthermore, fewer Hispanics practiced healthy lifestyles and preventive measures, such as breast cancer screening, cervical cancer screening, condom use, and consumption of folic acid. Hispanics also had significantly lower prevalence of having healthcare coverage, dental coverage, and visiting a doctor or other healthcare providers (due to high costs), thereby missed opportunities for outreach services and education offered by many healthcare settings. Of the Hispanics who were able to access healthcare providers, significantly more received injury prevention education on smoke detectors, bicycle helmets, and seat belts, and reported higher rates of testing smoke detectors for proper operation than other groups.

### **Young Adults**

Many young adults surveyed, mostly in the 18 to 24 age group, considered themselves to be in fair or poor health. A high proportion of them experienced sexual assault, but the proportion was not significantly different than other age groups. More young adults reported being subjected to intimate partner violence, and did not practice preventive measures, such as smoking cessation and folic acid consumption. Although they represented higher proportions of receiving personal injury prevention education from health-care providers in the areas of smoke detectors, bicycle helmets, and seat belts, young adults reported lower practice of testing smoke detectors for proper operation.

Like Hispanics, young adults also reported significantly lower prevalence of having healthcare coverage, dental coverage, and visiting a doctor or other healthcare providers (due to high costs), thereby missing opportunities for outreach services and education offered by many healthcare settings.

### **Low Income Individuals**

Like all other groups identified as having health disparities, low income individuals perceived themselves to be in fair or poor health, but they lacked the ability to seek health-care due to high costs of medical services and lack of health insurance and dental coverage. Due to missed opportunities of receiving preventive education from health providers, significantly more respondents in lower income levels reported lower prevalence of cervical cancer screening tests, folic acid consumption, and receiving education on personal injury prevention topics, such as smoke detectors, bicycle helmets, and seat belts. Furthermore, significantly higher proportions of low-income adults reported smoking.

Of the 21 health topic areas covered in this report, five were identified as priority areas that programs could focus on due to increased prevalence, extent of inadequate healthy practices, and disparities from the Healthy People 2010 objectives. These topic areas include (1) healthcare coverage and doctor visits, (2) chronic and binge alcohol consumption, (3) overweight and obesity, (4) women's healthy practices (folic acid consumption and family planning), and (5) intimate partner violence (IPV). All populations with observed health disparities also overlapped with these priority health topics.

### **Healthcare Coverage and Doctor Visits**

The Healthy People 2010 goal for healthcare coverage is 100%, suggesting that all Santa Clara County residents should have access to the healthcare system, whether by a public or private provider. Results from this survey found that not all adults in the county had coverage. Groups that reported significantly lower healthcare coverage than other groups included Hispanics, young adults (18 to 24 years old), and those with low income.

Significantly fewer Hispanic respondents reported having a health plan, receiving health insurance from an employer, and having one, consistent primary care practitioner. Moreover, greater proportions of Hispanics were covered by Medi-Cal and did not have healthcare coverage during the year prior to the survey interview.

Young adults were more likely to depend on other family members for coverage. In light of this finding, it could be deduced that young adults may have still been in school or employed where health coverage is not offered as a benefit.

Fewer respondents in lower income levels reported having healthcare coverage, and many were not able to access healthcare due to high costs. Although some respondents who fell under the Federal Poverty Level were employed, not all jobs offer healthcare benefits or pay adequate salaries that support the purchase of private health insurance. Paying for healthcare costs can be prohibitive when there are already limited funds for other necessities, such as housing, food, and clothing.

Seeing a doctor or healthcare provider on a routine basis increases the chances of screening for various types of chronic and debilitating illnesses that can be prevented by early diagnosis and detection. Although more than half of the respondents saw a doctor within the past 12 months, about 5.3% could not see a doctor because of high costs. Results from this survey indicate that Santa Clara County has lowered this barrier against seeing a doctor since the last BRFS was conducted in 1997, and is advancing more so with this issue than the rest of the state and nation. However, disparities existed among those of Hispanic origin, in younger age groups, with fewer years of education, in lower income levels, and among those who did not have health insurance.

### **Chronic and Binge Alcohol Consumption**

Drinking, on the whole, was prevalent among men, Whites, and among people with higher income and education. However, the prevalence of acute drinking that poses public health threat was higher among Hispanics and men. Acute drinking was also more prevalent in younger people and people with lower income and education.

Chronic and binge alcohol use is associated with a wide range of concerns, including high blood pressure, trauma, motor vehicle collisions, accidents, intimate partner violence, cancer, fetal alcohol syndrome, and mental health problems (Fleming, 1998). Hence, interventions that focus on reducing alcohol consumption that exceed recommended limits are key to reducing the prevalence of associated negative health concerns.

### **Overweight and Obesity**

Overweight and obesity can occur across all groups and populations. In the United States, obesity has reached epidemic proportions. In Santa Clara County, over 51% of respondents were either overweight or obese at the time the survey was conducted in 2000. More males were at risk for being overweight, whereas more women were at risk for being obese. Lower educational status was a significant factor in determining the risk for being obese or overweight. Former smokers were also at an increased risk for being overweight or obese.

Being overweight or obese is known to have a direct impact on chronic disease conditions. Survey results revealed that arthritis, asthma, high blood pressure, and diabetes were more likely to occur in those who were above a healthy body weight. Though chronic diseases do not appear until middle age or later, having a body weight above normal during younger years can increase the risk for acquiring these diseases. Once chronic diseases are diagnosed, bodyweight reduction is important in reducing and controlling the other health problems and impairments associated with these chronic disease conditions. An active lifestyle and a healthy diet are key in achieving and maintaining a healthy weight. Maintaining a healthy weight will have direct implications on lowering the burden of disease in a community as well as increasing the quality of life at the individual level.

### **Women's Health Practices – Family Planning and Folic Acid Consumption**

Overall use of birth control methods by non-pregnant women age 18 to 44 in Santa Clara County was far below the national 2010 target. Use of birth control methods was even lower among Asians and Hispanics. Other subgroups who had lower birth control use were younger women age 18 to 24, unmarried women, and women with less years of education. Interventions that increase family planning education and birth control use are necessary to reduce the prevalence of unintended pregnancies in Santa Clara County.

Folic acid supplementation during pregnancy is very important in preventing birth defects in newborns. Unfortunately only 50% of women of childbearing age took folic acid supplementation. Folic acid intake was even lower among Hispanics compared with other ethnic groups. Additionally, folic acid intake was disproportionately lower among women less than 25 years of age and with lower income and years of education. The vast majority of the women were unaware about the benefit of folic acid on pregnancy outcome, which needs to be emphasized in education programs in order to increase folic acid intake among all women of childbearing age.

Both birth control use and folic acid intake was lower among women who did not have any routine physical check up, which again emphasizes the importance of promoting healthy practices in educational programs that address women's health.

### **Intimate Partner Violence (IPV)**

According to the findings from the National Violence Against Women Survey approximately 1.5 million women and 834,000 men were raped and/or physically assaulted by their intimate partner annually in the nation (CDC 2001). Although the nature of the subject posed some methodological and analytical challenges in this survey, the data presented highlights the prevalence of violence and sexual abuse among residents of Santa Clara County for the first time. Estimates from this survey suggest that about 10% of the respondents experienced violence as a child, saw or heard their parents get hurt, and about 4% were sexually assaulted before their 18<sup>th</sup> birthday. About 2.3% of respondents were victimized in the past year the BRFSS was conducted, of whom over half did not know their relationship to their perpetrator. Less than 1% also reported being physically hurt. Nearly 3% were sexually abused as an adult and 3.3% were forced to engage in unwanted sexual activities. Factors that were correlated with history of violence or sexual abuse included being physically and mentally unwell and not being married at the time of the survey. Women, younger adults, and White women were more likely to report victimization by an intimate partner.

Although results from this survey present IPV data for the first time, further studies are needed to better understand the context of violence at the individual and community level, the psychological consequences, and long-term effects, in order to plan comprehensive interventions and reduce the prevalence of this significant health issue in Santa Clara County.

Recommendations gleaned from expert opinions and some SCC Public Health Department programs are suggested below for increasing access to healthcare coverage, decreasing chronic and binge alcohol consumption, reducing overweight and obesity, increasing family planning/contraceptive use, increasing folic acid consumption, and reducing intimate partner violence.

## **Increasing Access to Healthcare Coverage**

1. Continue collection of relevant data for planning, monitoring, and evaluation efforts, while strengthening the relationship with other providers (The California Endowment, n.d.).
2. Support local policy and advocacy activities that focus on increasing access to health coverage and care for low-income and uninsured individuals (The California Endowment, n.d.).
  - A) Advocate for insurance market reforms to encompass a broad array of policies that can be implemented and provide more affordable coverage, such as revising rules of issue (i.e. guaranteed issue, renewability, portability, limits on pre-existing condition exclusions), mandated benefits, community rating, and purchasing cooperatives (Blumber and Nichols, 1995, as cited by Blumberg and Liska, 1996).
  - B) Encourage health insurance market competition through data collection and dissemination of diagnoses, treatments, outcomes, and costs; standard benefit packages to allow simple comparison of plan prices and reduce difficulty in discerning best deals for coverage; and regulation of marketing practices (Blumberg and Liska, 1996).
3. Support local coalition/capacity building efforts in improving coordination efforts and providing training and capacity in developing necessary resources. (The California Endowment, n.d.).
4. Target populations that are documented to have the lowest healthcare coverage in Santa Clara County when planning outreach and retention efforts, through media advocacy and public awareness efforts; reduce the stigma and fear associated with utilizing public health insurance programs, and enhance awareness about the importance and availability of health coverage programs. (The California Endowment, n.d.).

## Reducing Chronic and Binge Alcohol Consumption

5. Increase alcohol screening in healthcare settings through educational outreach visits to individual clinicians and including questions on alcohol consumption in existing patient questionnaires (Fleming, 1998).
6. Incorporate positive drinking models and safe drinking environments in health promotional media campaigns that educate the public on low-risk drinking situations, and reduce emphasis on stereotypical events and characteristics of “at risk” drinkers (De Crespigny, 2000).
7. Promote responsible marketing of alcohol through policing of unacceptable and unsafe marketing of cheap drinks and informing the public on how and where to register complaints about unsafe or inappropriate marketing practices (De Crespigny, 2000).
8. Collect baseline data on alcohol outlet density, zoning laws limiting access, products or advertising, and conditional permits, and updated resource list of other local programs that share the responsibility in reducing alcohol-related concerns (County of Ventura, California, 2001).
9. Create countywide coalitions that include members from multiple disciplines, agencies, and sectors focusing on planning, implementation, problem-solving, advocacy, and evaluation efforts that target the reduction of alcohol consumption, which can potentially lead to traffic collisions and violent behavior (SCC Traffic Safe Communities Network and SCC Violence Prevention Program, 1998).
10. Conduct Place of Last Drink Survey (POLD) to identify high-risk environments for drinking and driving to help public agencies and community coalitions focus prevention and intervention efforts. The POLD study is designed to query adjudicated DUI (driving under the influence) offenders as they enroll in first-time offender or multiple offender classes (SCC Traffic Safe Communities Network, 2001).
11. Support state and national efforts to maintain alcohol-related tax revenue to keep up with inflation and raise awareness of the link between alcoholic beverage prices, availability, and problems associated with abusive consumption and/or consumption by youth and pregnant women (SCC Violence Prevention Program, 1998).
12. Assess and strengthen model commercial zoning district ordinances through the conditional use permit (CUP) process, as a safeguard against alcohol outlet density (SCC Violence Prevention Program, 1998).



## Reducing Overweight and Obesity

13. Educate communities about health issues related to overweight and obesity, using informed and sensitive approaches (Office of the Surgeon General, 2002).

- A) Change the perception of overweight and obesity at all ages, and focusing the primary concern on health and not appearance.
- B) Educate communities about health issues related to overweight and obesity (i.e. increased physical activity and healthy diets), using informed and sensitive approaches.
- C) Provide culturally appropriate education in schools and communities about healthy eating habits and regular physical activity, based on the Dietary Guidelines for Americans, for people of all ages. Emphasize the consumer's role in making wise food and physical activity choices.

14. Invest in research that improves the understanding of the causes, prevention, and treatment of overweight and obesity (Office of the Surgeon General, 2002).

## Increasing Women's Health Practices

### A) Increasing Family Planning and Contraceptive Use

15. Increase outreach and education efforts on family planning, particularly among populations with a low prevalence of using birth control/contraception and a high prevalence of unintended pregnancies (Alan Guttmacher Institute, 2000).

16. Support full contraceptive coverage in private insurance plans (Alan Guttmacher Institute, 2000).

### B) Increasing Folic Acid Consumption

17. Develop a folic acid community awareness plan that is linguistically and culturally tailored to target populations, especially those who report lower prevalence of folic acid consumption (Folic Acid Alliance of Ontario, 2002).

18. Encourage healthcare providers and educators of prenatal classes to regularly provide folic acid awareness education to female clients of childbearing age, including discussion of multivitamin supplementation and foods rich in or fortified with folic acid and to disseminate educational materials (Folic Acid Alliance of Ontario, 2002).

## Reducing Intimate Partner Violence

19. Conduct universal screening for violence at family planning clinics, hospitals, and during prenatal care. Screening should be carried out in a sensitive and culturally competent way (Flitcraft, 1999, as cited by Moore, 1999).
20. Develop an Intimate Partner Violence Surveillance System to link cases with hospital, mortality, and other data available to better understand the magnitude and epidemiology of deaths and injuries resulting from intimate partner violence (Oklahoma State Department of Health, 2000).
21. Develop education programs for women, men, and teenagers including school-based programs to minimize risk and increase awareness on support services. (Moore, 1999).
22. Conduct training for healthcare providers and law enforcement officers in responding to intimate partner violence and rape (i.e. Recognizing intimate partner violence injuries and providing referrals to appropriate resources). (CDC, 1997).
23. Improve and increase media coverage of violence in the community by training media outreach representatives on violence prevention coverage (SCC Violence Prevention Program, 1999).
24. Develop a Violence Prevention Information Library (VPIL) to capture the full scope and magnitude of violence in the community, including precursors and factors associated with violence. Use trends to guide decision and planning efforts (SCC Violence Prevention Program, 1999).
25. Increase community awareness and capacity about available community resources to maximize coordination and decrease duplication of efforts by developing a Violence Prevention Resource Inventory (SCC Violence Prevention Program, 1999).
26. Create a countywide coalition that includes members from multiple disciplines, agencies, and sectors focusing on planning, implementation, problem-solving, advocacy, and evaluation efforts that promote violence-free relationships (SCC Violence Prevention Program, 1998).

Below are descriptions of Santa Clara County Public Health Department programs that address priority health topic areas identified by the Behavioral Risk Factor Survey (2000). Descriptions of all Public Health Programs are provided in Appendix B.

### **Healthcare Coverage, and Doctor Visits**

The Public Health Department does not typically provide healthcare coverage/health insurance to clients. Rather, more emphasis is focused on prevention and early detection, as well as health promotion services. Although all staff in the Department provide referrals to appropriate resources when requested, there are several programs that also offer clients linkage and assistance (care coordination) with accessing appropriate medical care services and examining coverage eligibility. For example, staff inform clients about healthcare benefits, insurance plans available, and enrollment availability, and even link clients to services by assisting with appointments or transportation issues. Furthermore, some Public Health programs also provide assessment of health needs, either through a partnering network or as part of staffs' case management services, to identify and assist clients in accessing needed medical care and services.

Public Health regional or central programs that primarily provide or coordinate assessment of health needs, case management services, and/or health education are:

- Adolescent Family Life Program (AFLP)
- Adolescent Sibling Pregnancy Prevention Program (Sibling Program)
- Asthma Case Management
- Black Infant Health (BIH)
- Breastfeeding Promotion Project
- Burbank Project
- CAL-Learn
- California Children's Services (CCS) Program
- Child Care Health Consultation Program
- Child Health and Disability Prevention (CHDP)
- Childhood Lead Poisoning Prevention Program (CLPPP)
- Community Health Council
- Comprehensive Perinatal Services Program (CPSP)
- Crane Center
- Diabetes Case Management
- Disease Control and Surveillance Program
- Emergency Medical Services (EMS) Agency
- Families Project

## public health programs addressing health priorities

- First Time Mom's Project
- Foster Care Program
- The HIV/AIDS Prevention and Control Program (HAP)
- Immunization (IZ) Program (Education Planning and Clinics)
- Lenzen Gardens
- Maternal Child & Adolescent (MCAH) Outreach
- Medically Vulnerable Infant Program (MVIP or aka "Pasitos/Little Steps")
- Needle Exchange Program
- NIGHT Program Mobile Van
- Perinatal Hepatitis B
- Perinatal Substance Abuse Team
- Project LEAN
- Public Health Pharmacy
- Public Health Regional Neighborhood Van Services (Mobile Van)
- STD Prevention and Control Program
- Sudden Infant Death Syndrome (SIDS) Program
- Tobacco Prevention & Education Program (TPEP)
- Tuberculosis (TB) Prevention and Control Program
- Women, Infants, and Children (WIC)

### **Chronic and Binge Alcohol Consumption**

Public Health programs generally provide education and referrals for clients identified as at risk for alcohol abuse and their children, who may be exposed to alcohol prenatally. In such cases, staff follow high-risk infants, and provide case management and care coordination services as needed. Programs that deliver these services are Adolescent Family Life Program (AFLP), Black Infant Health (BIH), CAL-Learn, Adolescent Sibling Pregnancy Prevention Program (Sibling Program), Child Health and Disability Prevention (CHDP) program, Comprehensive Perinatal Services Program (CPSP), Families Project, First Time Moms Project, Foster Care Program, Medically Vulnerable Infant Program (MVIP), Perinatal Substance Abuse Team, and Public Health Regional Neighborhood Van Services (Mobile Van). Clients are referred to the Perinatal Substance Abuse Program when necessary.

## **Overweight and Obesity**

Public Health Department programs generally address the importance of proper nutrition and discourage lifestyles that can lead to obesity and overweight. Assessment, education, and referrals are rendered based on need. Programs that often address this issue are Adolescent Family Life Program (AFLP), Adolescent Sibling Pregnancy Prevention Program (Sibling Program), Black Infant Health (BIH), CAL-Learn, Comprehensive Perinatal Services Program (CPSP), Families Project, First Time Moms Project, Foster Care Program, Perinatal Substance Abuse Team, Public Health Regional Neighborhood Van Services (Mobile Van), Tobacco Prevention and Education Program (TPEP), and Women Infant and Children (WIC) program.

In addition, other programs further address obesity and overweight. For example, Project LEAN promotes healthy lifestyles by encouraging consumers to choose healthy foods and increase physical activity to maintain a healthy weight. The Child Health and Disability Program (CHDP) and the Maternal, Child and Adolescent Health (MCAH) unit recently partnered with the Expanded Food Nutrition Education Program (EFNEP) to create the coalition, Children and Weight, which focuses on preventing childhood obesity, educating parents on proper nutritional practices, and identifying other implementation interventions. Furthermore, the Comprehensive Perinatal Services Program (CPSP), coordinated through the Maternal Child and Adolescent Health unit, supports and monitors pregnant and postpartum women who were overweight prior to pregnancy. These clients are presented with weight loss education and are monitored throughout their pregnancy. Referrals to a dietitian are offered when needed.

## **Women's Health Practices Family Planning**

Family Planning methods, education, and referrals are addressed by programs, such as Adolescent Family Life Program (AFLP), Adolescent Sibling Pregnancy Prevention Program (Sibling Program), Black Infant Health (BIH), Breastfeeding Promotion project, CAL-Learn, California Children's Services (CCS) program, Child Care Health Consultation Program, Comprehensive Perinatal Services Program (CPSP), Families Project, First Time Moms Project, Foster Care Program, Maternal Child and Adolescent Health (MCAH) Outreach, Perinatal Substance Abuse Team, Public Health Regional Neighborhood Van Services (Mobile Van), and Women Infant and Children (WIC) program. Public health nurses (PHNs) in the Mobile Van Services also perform pregnancy testing for clients.

### **Women's Health Practices Folic Acid Consumption**

Public Health Department programs generally educate clients about the importance of folic acid intake to reduce the risk of giving birth to infants with neural tube defects, especially during prenatal and postpartum outreach visits. Programs that often address this issue are Adolescent Family Life Program (AFLP), Adolescent Sibling Pregnancy Prevention Program (Sibling Program), Black Infant Health (BIH), Breastfeeding Promotion project, CAL-Learn, California Children's Services (CCS) program, Child Care Health Consultation Program, Child Health and Disability Prevention (CHDP) program, Comprehensive Perinatal Services Program (CPSP), Families Project, First Time Moms Project, Foster Care Program, projects in the Dependency Drug Court Team, Medically Vulnerable Infant Program (MVIP), Maternal Child Adolescent Health (MCAH) Outreach, Perinatal Substance Abuse Team, Public Health Regional Neighborhood Van Services (Mobile Van), and Women Infant and Children (WIC) program.

### **Intimate Partner Violence (IPV)**

Staff from the Public Health Department report any observed evidence of intimate partner violence to local police jurisdictions. Such mandatory reporting is also supplemented by providing support and linkage to other resources and needed health services. Programs that may encounter evidence of intimate partner violence are generally programs that provide health assessments to clients, such as Adolescent Family Life Program (AFLP), Adolescent Sibling Pregnancy Prevention Program (Sibling Program), Black Infant Health (BIH), CAL-Learn, Child Health and Development Program (CHDP), Comprehensive Perinatal Services Program (CPSP), Families Project, First Time Moms Project, Lenzen Gardens, Perinatal Substance Abuse Team, and Public Health Regional Neighborhood Van Services (Mobile Van).

The Violence Prevention Program also works with professionals and advocates from county agencies and community-based organizations to develop and support programs within the community that promote violence-free relationships.

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## matrix of outcome comparison of BRFs results in Santa Clara County, CA, and US

Health Indicator	Santa Clara County				California (CDC)		National (CDC)	
	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000	
	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI
Health & General Well-Being								
How individuals perceive their general health								
Excellent	30.1	27.7 - 32.7	25.7	24.1 - 27.5	22.3	20.9 - 23.6	22.2	20.9 - 23.6
Very Good	35.6	33.1 - 38.3	32.7	30.9 - 34.9	33.9	32.1 - 35.6	33.9	32.1 - 35.6
Good	23.6	21.4 - 26.0	28.5	26.7 - 30.3	27.1	25.3 - 28.8	29.2	27.1 - 30.3
Fair	7.4	6.0 - 8.8	9.9	8.7 - 11.0	13.0	11.6 - 14.3	10.1	8.7 - 11.0
Poor	3.0	2.1 - 3.9	3.1	2.4 - 3.7	3.7	2.9 - 4.4	3.4	2.9 - 4.4
Number of days, in the past 30 days, individuals did not have good physical health								
None	58.0	55.4 - 60.7	65.7	63.8 - 67.6	66.1	64.3 - 67.8	65.7	64.3 - 67.8
1 to 2 days	13.3	11.5 - 15.2	12.1	10.7 - 13.3	10.2	9.0 - 11.3	11.8	10.2 - 11.3
3 to 7 days	14.9	12.9 - 16.8	10.5	9.4 - 11.8	10.7	9.5 - 11.8	10.4	9.5 - 11.8
8 to 29 days	8.2	6.7 - 9.6	7.5	5.5 - 8.6	7.5	6.5 - 8.4	6.0	5.5 - 8.6
30 days	4.5	3.3 - 5.6	4.2	3.4 - 5.0	5.6	4.6 - 6.5	5.7	4.6 - 6.5
Number of days, in the past 30 days, individuals did not have good mental health								
None	63.3	60.7 - 65.9	64.2	62.3 - 66.1	62.7	60.9 - 64.4	67.0	62.7 - 66.1
1 to 2 days	11.9	10.1 - 13.6	11.7	10.4 - 12.9	10.6	9.4 - 11.7	9.8	10.6 - 11.7
3 to 7 days	11.2	9.5 - 13.0	12.1	10.8 - 13.3	13.8	12.6 - 14.9	10.7	13.8 - 14.9
8 to 29 days	7.1	5.7 - 8.5	7.7	6.7 - 8.8	9.6	8.4 - 10.7	7.8	9.6 - 10.7
30 days	4.2	3.1 - 5.3	4.4	3.6 - 5.2	3.3	2.7 - 3.8	4.4	3.3 - 3.8

Health Indicator	Santa Clara County						California (CDC)			National (CDC)	
	BRFS 1997			BRFS 2000			BRFS 2000		Percent	BRFS 2000	
	Percent	95 %CI		Percent	95 %CI		Percent	95 %CI		Percent	
Number of days (in the past 30 days) individuals had poor physical or mental health that kept them from doing usual activities	None	25.0	13.2 - 36.8	77.7	76.1 - 79.4		78.0	76.4 - 79.5		81.0	
	1 to 2 days	40.4	27.0 - 53.7	8.8	7.7 - 9.9		7.4	6.4 - 8.3		6.7	
	3 to 7 days	17.3	7.0 - 27.6	6.7	5.8 - 7.7		6.7	5.7 - 7.6		5.6	
	8 to 29 days	3.8	0.0 - 9.1	4.2	3.5 - 5.1		4.9	3.9 - 5.8		3.9	
	30 days	11.5	2.9 - 20.2	2.5	1.9 - 3.1		3.0	2.4 - 3.5		2.7	
<b>Health Care Coverage</b>											
<b>Marital status</b>											
Married	50.2	47.4 - 52.9	59.9	58.0 - 61.8		NA	NA	NA		NA	
Divorced	14.0	12.1 - 15.8	8.2	7.1 - 9.2		NA	NA	NA		NA	
Widowed	7.0	5.6 - 8.4	4.1	3.3 - 4.8		NA	NA	NA		NA	
Separated	3.6	2.6 - 4.6	1.5	1.1 - 2.0		NA	NA	NA		NA	
Never been married	21.9	19.6 - 24.1	21.6	20.0 - 23.2		NA	NA	NA		NA	
A member of an unmarried couple	3.5	2.5 - 4.5	4.7	3.9 - 5.6		NA	NA	NA		NA	
<b>Have health care coverage</b>											
Yes	89.8	88.2 - 91.5	92.2	91.2 - 93.3		81.6	80.0 - 83.1			88.1	
<b>Health care coverage through employer</b>											
Yes	55.6	52.9 - 58.3	60.0	58.1 - 61.9		NA	NA	NA		NA	
<b>Health care coverage through someone else's employer</b>											
Yes	22.6	20.4 - 24.9	25.0	23.3 - 26.7		NA	NA	NA		NA	

	Santa Clara County						California (CDC)			National (CDC)
	Health Indicator	BRFS 1997			BRFS 2000			BRFS 2000		BRFS 2000
		Percent	95 %CI		Percent	95 %CI		Percent	95 %CI	Percent
Health care coverage that you buy privately	Yes	17.2	15.1 - 19.2		20.5	18.9 - 22.1	NA	NA	NA	NA
Health care coverage through Medicare	Yes	13.6	11.8 - 15.5		15.2	13.8 - 16.6	NA	NA	NA	NA
Health care coverage through Medi-Cal	Yes	6.9	5.5 - 8.3		6.5	5.5 - 7.4	NA	NA	NA	NA
Health care coverage through military or VA	Yes	2.0	1.2 - 2.8		1.8	1.3 - 2.3	NA	NA	NA	NA
Health care coverage through Indian Health Service	Yes	0.2	0.0 - 0.4		0.5	0.2 - 0.8	NA	NA	NA	NA
Health care coverage through some other source	Yes	5.7	4.4 - 7.0		12.3	11.0 - 13.6	NA	NA	NA	NA
How much does health insurance premium pay?	All	54.0	50.8 - 57.2		43.2	40.8 - 45.4	NA	NA	NA	NA
	Part	39.5	36.4 - 42.7		52.5	50.2 - 54.9	NA	NA	NA	NA
	None	2.1	1.1 - 3.0		4.3	3.4 - 5.3	NA	NA	NA	NA

Health Indicator	Santa Clara County				California (CDC)			National (CDC)	
	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000		BRFS 2000
	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent
Type of health care coverage used to pay most medical care									
My employer	41.5	36.2 - 46.8	43.6	40.4 - 46.9	55.7	53.8 - 58.0		53.8 - 58.0	61.7
Someone else's employer	17.3	13.2 - 21.4	20.2	17.6 - 22.9	22.0	20.0 - 23.9		20.0 - 23.9	21.2
Purchased plan	11.5	8.1 - 15.0	14.2	11.9 - 16.5	10.4	9.0 - 11.7		9.0 - 11.7	7.1
Medicare	21.5	17.1 - 25.9	15.3	12.8 - 17.8	-	NA		NA	0.3
Medi-Cal (Medicaid)	2.7	1.0 - 4.5	1.8	0.9 - 2.7	7.2	6.0 - 8.3		6.0 - 8.3	3.0
Military/VA	0.6	NA	1.1	0.4 - 1.7	3.5	2.5 - 4.4		2.5 - 4.4	2.2
Indian Health	-	NA	1.8	0.9 - 2.7	0.1	NA		NA	-
Other	1.5	NA	2.1	1.1 - 3.0	1.1	0.5 - 1.6		0.5 - 1.6	1.9
Time having particular health care coverage									
0-12 months	28.5	26.0 - 31.1	24.5	22.8 - 26.3	NA	NA		NA	NA
1-2 years	12.0	10.1 - 13.8	14.5	13.0 - 15.9	NA	NA		NA	NA
2-3 years	8.6	7.0 - 10.2	10.3	9.1 - 11.6	NA	NA		NA	NA
3-5 years	9.6	8.0 - 11.3	10.1	8.9 - 11.3	NA	NA		NA	NA
5+ years	40.4	37.6 - 43.2	40.6	38.6 - 42.6	NA	NA		NA	NA
Satisfaction with present health insurance plan									
Very Satisfied	47.9	45.0 - 50.7	45.7	43.6 - 47.7	NA	NA		NA	NA
Satisfied	34.4	31.7 - 37.1	35.7	33.7 - 37.7	NA	NA		NA	NA
Neutral	8.7	7.1 - 10.3	12.2	10.8 - 13.5	NA	NA		NA	NA
Dissatisfied	5.3	4.0 - 6.5	4.8	3.9 - 5.7	NA	NA		NA	NA
Very Dissatisfied	1.6	0.9 - 2.3	1.6	1.1 - 2.1	NA	NA		NA	NA



Health Indicator	Santa Clara County				California (CDC)			National (CDC)
	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000	
	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent	Percent
Individuals without health insurance/coverage during past 12 months								
Yes	7.4	5.9 - 8.9	7.5	6.5 - 8.6	9.1	7.7 - 10.4	8.4	
Length of time since individuals had health coverage								
Never had it	13.0	8.3 - 17.8	24.0	18.4 - 29.9	20.5	15.9 - 25.0	9.8	
Past 6 months	32.8	26.2 - 39.5	26.0	20.1 - 32.0	17.8	13.6 - 21.9	23.2	
Past year	20.3	14.6 - 26	12.1	7.5 - 16.2	11.2	8.2 - 14.1	13.4	
Past 2 years	8.9	4.8 - 12.9	8.3	4.8 - 12.3	11.3	8.3 - 14.2	13.9	
Past 5 years	8.9	4.8 - 12.9	17.3	12.0 - 22.1	14.9	11.3 - 18.4	15.2	
5+ years ago	12.0	7.4 - 16.6	12.3	7.9 - 16.8	24.4	20.2 - 28.5	24.3	
<b>Doctor's Visits</b>								
Needed to see a doctor due to illness/injury in past 12 months								
Yes	57.4	54.7 - 60.1	49.2	47.3 - 51.2	NA	NA	NA	
Proportion of Individuals who reported cost as a barrier to seek health care								
Yes	8.3	6.8 - 9.8	5.3	4.4 - 6.2	12.8	11.6 - 13.9	9.9	
Individual is limited in any way in activities because of impairment or health problem								
Yes	18.3	16.2 - 20.4	17.0	18.8 - 22.2	NA	NA	NA	

Health Indicator	Santa Clara County				California (CDC)			National (CDC)	
	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000	BRFS 2000	
	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent	Percent	Percent
Individuals impairment that limits activities									
Arthritis/rheumatism	14.7	10.2 - 19.2	10.8	7.9 - 13.8	NA	NA	NA	NA	NA
Back or neck problem	16.4	11.7 - 21.1	17.3	13.7 - 20.9	NA	NA	NA	NA	NA
Fractures, bone/joint injury	17.6	12.8 - 22.5	14.2	10.9 - 17.5	NA	NA	NA	NA	NA
Walking problem	8.8	5.2 - 12.4	4.9	2.9 - 7.0	NA	NA	NA	NA	NA
Lung/breathing problem	5.5	2.6 - 8.3	4.4	2.5 - 6.5	NA	NA	NA	NA	NA
Hearing problem	1.3	0.0 - 2.7	NA	NA	NA	NA	NA	NA	NA
Eye/vision problem	4.6	2.0 - 7.3	5.1	2.9 - 7.0	NA	NA	NA	NA	NA
Heart problem	5.9	2.9 - 8.9	3.3	1.6 - 5.0	NA	NA	NA	NA	NA
Stroke problem	0.8	0.0 - 2.0	2.6	1.1 - 4.1	NA	NA	NA	NA	NA
Hypertension/high blood pressure	NA	NA	1.8	0.6 - 3.2	NA	NA	NA	NA	NA
Diabetes	2.5	0.5 - 4.5	3.6	1.8 - 5.3	NA	NA	NA	NA	NA
Cancer	0.8	0.0 - 2.0	NA	NA	NA	NA	NA	NA	NA
Depression/anxiety/emotional problem	2.9	0.8 - 5.1	2.0	0.6 - 3.2	NA	NA	NA	NA	NA
Other impairment problem	16.8	12.1 - 21.6	28.7	24.9 - 32.9	NA	NA	NA	NA	NA
Individuals' last visit to doctor for routine checkup									
Never went	3.1	2.2 - 4.1	4.4	3.6 - 5.2	4.5	3.7 - 5.2	4.5	3.7 - 5.2	1.0
Past year	58.5	55.8 - 61.2	58.7	56.8 - 60.7	62.9	61.1 - 64.6	62.9	61.1 - 64.6	72.2
Past 2 years	16.9	14.8 - 18.9	19.1	17.6 - 20.7	14.1	12.7 - 15.4	14.1	12.7 - 15.4	12.3
Past 5 years	9.8	8.1 - 11.4	10.8	9.6 - 12.0	9.8	8.8 - 10.7	9.8	8.8 - 10.7	6.7
5+ years ago	11.7	10.0 - 13.5	6.9	5.9 - 7.9	8.8	7.8 - 9.7	8.8	7.8 - 9.7	7.5

Health Indicator	Santa Clara County				California (CDC)			National (CDC)
	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000	
	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent	
<b>Blood Pressure</b>								
Time since last blood pressure taken by health professional								
0-6 months	73.1	70.6 - 75.5	66.6	64.7 - 68.4	NA	NA	NA	
6 months-1 year	11.9	10.2 - 13.7	15.9	14.4 - 17.3	NA	NA	NA	
1-2 years	7.5	6.0 - 8.9	11.0	9.8 - 12.3	NA	NA	NA	
3-5 years	3.0	2.1 - 3.9	3.8	3.0 - 4.5	NA	NA	NA	
5+ years	2.0	1.2 - 2.8	1.7	1.2 - 2.2	NA	NA	NA	
Never	0.9	0.4 - 1.4	1.1	0.7 - 1.5	NA	NA	NA	
Individuals diagnosed with high blood pressure								
Yes	20.4	18.2 - 22.6	19.1	17.5 - 20.6	NA	NA	NA	
Individuals told on more than one occasion that they have high blood pressure								
More than once	73.3	67.9 - 78.7	70.3	66.1 - 74.3	NA	NA	NA	
Only once	26.7	21.3 - 32.1	29.7	25.4 - 33.7	NA	NA	NA	
<b>Diabetes</b>								
Individuals diagnosed with diabetes	NA	NA	5.1	4.3 - 6.0	6.8	5.6 - 7.9	6.1	
Individuals diagnosed with pregnancy-related diabetes	NA	NA	1.2	0.8 - 1.6	1.6	1.2 - 1.9	0.8	
Diabetic individuals still taking insulin								
Yes	NA	NA	18.7	11.8 - 25.1	20.3	14.0 - 26.5	N/A	

		Santa Clara County						California (CDC)			National (CDC)
		BRFS 1997			BRFS 2000			BRFS 2000		BRFS 2000	
Health Indicator		Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent	
Tobacco											
Individuals who smoked at least 100 cigarettes in their lifetime											
Yes		39.6	37.0 - 42.3	36.9	35.1 - 38.8	NA	NA	NA	NA	NA	
How often individuals smoke											
Everyday		29.7	25.8 - 33.7	25.6	22.8 - 28.4	NA	NA	NA	NA	NA	
Somedays		11.7	8.9 - 14.4	14.0	11.8 - 16.2	NA	NA	NA	NA	NA	
Not at all		58.6	54.4 - 62.9	60.4	57.3 - 63.5	NA	NA	NA	NA	NA	
Average # cigarettes individuals smoke a day (those who smoke every day)											
1-20 cigarettes		87.4	82.1 - 92.7	94.1	91.1 - 97.1	88.3	85.1 - 91.4	82.1	82.1		
21-40 cigarettes		11.9	6.8 - 17.1	5.5	2.6 - 8.4	10.9	7.9 - 13.8	16.5	16.5		
41 or more cigarettes		NA	NA	NA	NA	0.8	0.0 - 1.9	1.4	1.4		
Individuals who smoked cigarettes in last 30 days											
Yes		17.1	13.2 - 21.0	19.1	16.2 - 22.1	NA	NA	NA	NA		
Average # cigarettes individuals smoke a day (those who don't smoke every day) during the past 30 days											
1-5 cigarettes		92.6	85.6 - 99.6	82.1	75.1 - 89.0	79.3	73.0 - 85.5	69.0	69.0		
6-10 cigarettes		7.4	0.4 - 14.4	13.7	7.4 - 19.9	12.7	8.0 - 17.4	22.5	22.5		
11-15 cigarettes		-	NA	NA	NA	3.7	0.5 - 6.8	3.2	3.2		
16-20 cigarettes		-	NA	NA	NA	4.3	0.7 - 7.8	4.0	4.0		
21+ cigarettes		-	NA	NA	NA	-	NA	1.1	1.1		

Health Indicator	Santa Clara County						California (CDC)			National (CDC)	
	BRFS 1997			BRFS 2000			BRFS 2000		Percent	BRFS 2000	
	Percent	95 %CI		Percent	95 %CI		Percent	95 %CI		Percent	
Age when first smoked whole cigarette											
<14	29.9	25.9 - 33.9		29.4	26.5 - 32.4		NA	NA	NA	NA	
15-17	36.2	32 - 40.4		35.3	32.2 - 38.4		NA	NA	NA	NA	
18-20	19.2	15.8 - 22.6		23.0	20.3 - 25.8		NA	NA	NA	NA	
>21	14.7	11.6 - 17.7		12.3	10.1 - 14.3		NA	NA	NA	NA	
Age individuals first started smoking cigarettes regularly											
<14	11.6	8.7 - 14.4		9.5	7.6 - 11.5		NA	NA	NA	NA	
15-17	24.8	20.9 - 28.7		29.1	26.0 - 32.0		NA	NA	NA	NA	
18-20	35.3	31.0 - 39.6		35.5	32.4 - 38.7		NA	NA	NA	NA	
>21	28.4	24.3 - 32.4		25.9	23.0 - 28.8		NA	NA	NA	NA	
Individuals who have quit smoking for 1 day or longer (those who smoke every day) during past 12 months											
Yes	51.6	43.7 - 59.6		52.9	46.4 - 59.0		56.1	50.4 - 61.7	49.4		
When not smoking, reason was because individuals were trying to quit											
Yes	55.2	43.3 - 67.1		55.9	50.0 - 62.0		NA	NA	NA	NA	
Length of time from awaking that individuals start smoking											
Immediately	36.4	30.0 - 42.7		7.5	4.9 - 10.6		NA	NA	NA	NA	
Within 10 minutes	25.0	19.3 - 30.7		10.7	7.4 - 14.0		NA	NA	NA	NA	
Within one hour	30.5	24.4 - 36.5		35.3	30.2 - 40.4		NA	NA	NA	NA	
Between one and two hours	8.2	4.6 - 11.8		17.2	13.2 - 21.2		NA	NA	NA	NA	
2+ hours	28.2	22.2 - 34.1		29.1	24.2 - 33.9		NA	NA	NA	NA	

Health Indicator	Santa Clara County				California (CDC)			National (CDC)
	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000	
	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent	
Individuals who would like to stop smoking								
Yes	65.5	59.2 - 71.7	77.3	73.0 - 81.6	NA	NA	NA	
Individuals who are planning to quit smoking in the next 30 days								
Yes	33.8	27.3 - 40.3	41.8	36.5 - 46.9	NA	NA	NA	
Individuals who are contemplating quitting smoking in the next six months								
Yes	56.3	47.9 - 64.6	58.2	51.5 - 64.9	NA	NA	NA	
Duration since individuals have last smoked regularly								
Never regular	0.7	NA	4.9	3.1 - 6.6	4.7	3.3 - 6.0	1.9	
0-1 month	1.0	NA	1.6	0.6 - 2.7	0.8	0.2 - 1.3	1.9	
1-3 months	2.3	0.6 - 4.0	1.4	0.4 - 2.4	1.8	1.0 - 2.5	2.1	
3-6 months	2.3	0.6 - 4.0	2.5	1.2 - 3.8	1.7	0.5 - 2.8	2.8	
6-12 months	4.0	1.8 - 6.2	4.1	2.5 - 5.8	4.4	3.0 - 5.7	4.3	
1-5 years	17.5	13.3 - 21.8	20.1	16.8 - 23.4	16.5	13.7 - 19.2	17.9	
5+ years	67.9	62.6 - 73.1	65.4	61.4 - 69.3	49.5	45.9 - 53.0	25.6	
Individual lives with someone else who smokes								
Yes	3.3	2.3 - 4.3	16.3	14.8 - 17.7	NA	NA	NA	
Number of other household members that currently smoke								
One other	65.8	50.7 - 80.9	75.8	71.7 - 80.0	NA	NA	NA	
2 or more	34.2	19.1 - 49.3	24.2	20.0 - 28.3	NA	NA	NA	

Health Indicator	Santa Clara County						California (CDC)			National (CDC)	
	BRFS 1997			BRFS 2000			BRFS 2000			BRFS 2000	
	Percent	95 %CI		Percent	95 %CI		95 %CI	95 %CI		95 %CI	95 %CI
<b>Cigar Use</b>											
Individual has smoking rules in their household											
Completely prohibited	73.4		71 - 75.8	64.3	62.4 - 66.2	NA	NA	NA	NA	NA	NA
Generally prohibited with few exceptions	8.0		6.5 - 9.5	6.6	5.7 - 7.6	NA	NA	NA	NA	NA	NA
Allowed in some rooms only	5.2		4.0 - 6.4	4.3	3.5 - 5.1	NA	NA	NA	NA	NA	NA
No restrictions	12.5		10.7 - 14.3	11.2	10.0 - 12.4	NA	NA	NA	NA	NA	NA
Person-based	NA		NA	0.7	0.4 - 1.0	NA	NA	NA	NA	NA	NA
Only in front or backyard	NA		NA	12.8	11.5 - 14.1	NA	NA	NA	NA	NA	NA
Other	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Asthma</b>											
Individuals diagnosed with asthma											
Yes	NA		NA	12.5	11.2 - 13.8	11.5	10.3 - 12.6	10.5			
<b>Preventive Health</b>											
Individuals have discussed exercise with their health care professional in last 3 years											
Yes	39.1		36.5 - 41.8	56.2	54.3 - 58.2	NA	NA	NA	NA	NA	NA
Individuals have discussed nutrition/diet with their health care professional in last 3 years											
Yes	34.7		32.1 - 37.3	43.5	41.6 - 45.4	NA	NA	NA	NA	NA	NA
Individuals have discussed smoking with their health care professional in last 3 years											
Yes	18.2		16.1 - 20.3	24.6	22.9 - 26.2	NA	NA	NA	NA	NA	NA

Health Indicator	Santa Clara County						California (CDC)			National (CDC)
	BRFS 1997			BRFS 2000			BRFS 2000			BRFS 2000
	Percent	95 %CI		Percent	95 %CI		Percent	95 %CI		Percent
Individuals have discussed gun safety with their health care professional in last 3 years										
Yes	5.1	3.9 - 6.3		7.3	6.3 - 8.3		NA	NA		NA
Individuals have discussed alcohol with their health care professional in last 3 years										
Yes	13.6	11.8 - 15.5		16.2	14.7 - 17.6		NA	NA		NA
Individuals have discussed STDs/HIV with their health care professional in last 3 years										
Yes	15.8	13.8 - 17.8		17.4	16.0 - 18.9		NA	NA		NA
Individuals have discussed safety belt/smoke detectors/helmet use with their health care professional in last 3 years										
Yes	NA	NA		15.6	14.2 - 17.1		NA	NA		NA
Individuals have discussed sexual practices or family planning with their health care professional in last 3 years										
Yes	NA	NA		18.7	17.2 - 20.2		NA	NA		NA
Individuals who participated in any health improvement program										
Yes	9.8	8.2 - 11.4		12.7	13.1 - 16.0		NA	NA		NA
offered by main employer	3.9	2.9 - 5.0		3.5	2.7 - 4.2		NA	NA		NA
through their health plan	2.4	1.6 - 3.2		4.3	3.5 - 5.1		NA	NA		NA
through a community organization or group	3.5	2.5 - 4.5		4.8	4.0 - 5.6		NA	NA		NA
Alcohol Use										
Individual has had at least one drink of any alcoholic beverage, in past month										
Yes	59.7	57.1 - 62.4		59.6	57.7 - 61.5		NA	NA		NA



Health Indicator	Santa Clara County						California (CDC)			National (CDC)
	BRFS 1997			BRFS 2000			BRFS 2000			BRFS 2000
	Percent	95 %CI		Percent	95 %CI		Percent	95 %CI	Percent	
On days that individual drank beer, they drank this number of beers, on average										
Mean	2.7	NA		2.3	NA		NA	NA	NA	
On days that individual drank wine they drank this number of glasses, on average										
Mean	1.7	NA		1.5	NA		NA	NA	NA	
On days that individual drank liquor they drank this number of drinks, on average										
Mean	2.4	NA		1.9	NA		NA	NA	NA	
Prevalence of binge drinking on at least one day of the past month	11.1	9.4 - 12.8		12.2	10.9 - 13.5		NA	NA	NA	
Individual has driven drunk this many times, in past month										
At least once	2.5	1.6 - 3.3		3.4	2.5 - 4.3		NA	NA	NA	
None	97.5	96.7 - 98.4		96.6	95.7 - 97.5		NA	NA	NA	
Individual has ridden in the car with a driver who was drunk										
At least once	4.4	3.2 - 5.5		3.2	2.5 - 3.9		NA	NA	NA	
None	95.8	94.7 - 96.9		96.8	96.1 - 97.5		NA	NA	NA	
Individual has felt they ought to cut down on drinking										
Yes	27.5	24.7 - 30.3		26.8	24.7 - 28.9		NA	NA	NA	
Individual has been annoyed by people criticizing their drinking										
Yes	9.8	7.9 - 11.7		9.1	7.7 - 10.5		NA	NA	NA	
Individual has ever felt bad or guilty about their drinking										
Yes	18.4	15.9 - 20.8		18.5	16.5 - 20.4		NA	NA	NA	

Health Indicator	Santa Clara County				California (CDC)		National (CDC)
	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000
	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent
Individual has ever had a drink first thing in the morning to steady their nerves or get rid of a hangover							
Yes	6.5	4.9 - 8.0	5.6	4.4 - 6.7	NA	NA	NA
Women's Health							
Women who have ever had a mammogram							
Yes	57.6	53.8 - 61.3	60.8	58.1 - 63.5	60.1	57.5 - 62.4	62.2
Duration since last mammogram							
Past year	60.8	56.0 - 65.7	65.1	61.7 - 68.4	66.7	63.7 - 69.6	69.1
Past 2 years	18.3	14.5 - 22.1	20.8	18.0 - 23.8	17.4	14.8 - 19.9	15.5
Past 3 years	8.0	5.3 - 10.7	4.6	3.1 - 6.1	5.6	4.0 - 7.1	4.8
Past 5 years	8.0	5.3 - 10.7	3.8	2.5 - 5.2	4.2	3.0 - 5.3	4.0
5+ years ago	4.6	2.5 - 6.7	5.7	4.1 - 7.4	6.1	4.7 - 7.4	6.1
Reason for last mammogram							
Routine checkup	89.9	86.9 - 92.9	91.4	89.3 - 93.4	88.9	86.9 - 90.8	89.2
Breast problem other than cancer	7.5	4.9 - 10.1	7.1	5.2 - 8.9	7.6	5.8 - 9.3	8.3
Had breast cancer	2.6	1.0 - 4.2	1.6	0.7 - 2.5	3.5	2.3 - 4.6	2.3
Women (over 40 years) who have ever had a clinical breast exam							
Yes	88.7	86.3 - 91.1	85.1	83.1 - 87.1	84.9	82.9 - 86.8	89.7

Health Indicator	Santa Clara County				California (CDC)			National (CDC)
	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000	
	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent	
Duration since last breast exam								
Past year	72.6	69 - 76.2	73.3	70.7 - 76.0	73.4	71.0 - 75.7	77.5	
Past 2 years	15.2	12.3 - 18.1	16.5	14.2 - 18.7	13.2	11.4 - 14.9	11.8	
Past 3 years	5.8	3.9 - 7.6	4.6	3.4 - 5.9	4.9	3.7 - 6.0	3.2	
Past 5 years	2.9	1.5 - 4.2	2.9	1.8 - 3.8	4.3	3.3 - 5.2	2.4	
5+ years ago	3.6	2.1 - 5.0	2.8	1.8 - 3.7	4.2	3.2 - 5.1	4.3	
Reason for last breast exam								
Routine checkup	94.5	92.6 - 96.3	95.1	93.8 - 96.4	93.6	92.4 - 94.7	94.7	
Breast problem other than cancer	4.2	2.6 - 5.8	4.1	3.0 - 5.4	4.5	3.3 - 5.6	3.8	
Had breast cancer	1.3	0.4 - 2.3	0.8	0.3 - 1.4	1.9	1.3 - 2.4	1.3	
Women who have ever had a Pap smear								
Yes	94.6	92.9 - 96.3	92.0	90.5 - 93.5	94.2	93.0 - 95.3	94.8	
Duration since last Pap smear								
Past year	70.7	67.2 - 74.2	70.0	67.3 - 72.6	67.6	65.2 - 69.9	70.5	
Past 2 years	17.0	14.1 - 19.9	16.0	13.9 - 18.2	15.5	13.5 - 17.4	12.6	
Past 3 years	4.1	2.6 - 5.6	5.1	3.9 - 6.5	4.8	3.6 - 5.9	4.3	
Past 5 years	2.2	1.1 - 3.3	3.0	2.1 - 4.1	4.3	3.3 - 5.2	3.0	
5+ years ago	5.5	3.7 - 7.3	5.8	4.4 - 7.1	7.8	6.4 - 9.1	8.4	

Health Indicator	Santa Clara County				California (CDC)		National (CDC)
	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000
	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent
Reason for last Pap Smear							
Routine exam	95.9	94.3 - 97.4	92.5	91.0 - 94.1	91.5	89.9 - 93.0	95.0
Current or previous problem	3.3	1.9 - 4.7	4.5	3.3 - 5.7	5.6	4.4 - 6.7	4.4
Other	0.8	0.1 - 1.5	3.0	2.0 - 4.0	2.9	2.1 - 3.6	0.5
Women who have ever had a hysterectomy							
Yes	16.4	13.6 - 19.3	17.3	14.6 - 18.7	20.0	18.0 - 21.9	22.2
Women who are pregnant							
Yes	7.5	4.9 - 10.2	5.7	3.9 - 7.5	5.1	3.7 - 6.4	4.6
HIV/AIDS							
Grade individuals perceive children should begin receiving education about HIV & AIDS							
Kindergarten	NA	NA	3.4	2.6 - 4.2	3.7	2.9 - 4.4	5.4
Elementary (1-6)	NA	NA	67.2	65.1 - 69.2	69.5	67.5 - 71.4	73.9
Junior High (7-8)	NA	NA	18.4	16.6 - 20.1	17.2	15.6 - 18.7	14.3
High School (9-12)	NA	NA	9.7	8.4 - 11.1	8.8	7.6 - 0.9	4.2
After High School/Never	NA	NA	2.3	0.8 - 1.8	0.7	0.3 - 1.0	1.5
Individuals who would encourage use of a condom if they had a teenager who was sexually active							
Yes	NA	NA	95.1	94.2 - 96.0	92.8	91.6 - 93.9	88.8
Would give other advice	NA	NA	2.1	1.5 - 2.7	NA	NA	9.2

Health Indicator	Santa Clara County						California (CDC)			National (CDC)	
	BRFS 1997			BRFS 2000			BRFS 2000		Percent	BRFS 2000	
	Percent	95 %CI		Percent	95 %CI		Percent	95 %CI		Percent	
Individuals' perceived chances of getting infected with the HIV virus											
High	1.8	0.9 - 2.7		3.3	2.6 - 4.1		6.5	5.3 - 7.6		2.0	
Medium	3.0	1.8 - 4.2		4.2	3.3 - 5.0		5.3	4.3 - 6.2		3.9	
Low	33.4	30.1 - 36.7		22.3	20.5 - 24.1		25.5	23.7 - 27.2		25.6	
None	57.7	54.3 - 61.2		70.2	68.2 - 72.1		62.8	60.8 - 64.7		68.2	
Individuals who have ever been tested for HIV, other than through blood donations											
Yes	NA	NA		49.8	47.7 - 52.0		53.8	49.6 - 57.9		48.7	
Individuals who have ever been tested for HIV in the past 12 months, other than through blood donations											
Yes	NA	NA		25.8	23.1 - 28.4		31.1	25.8 - 36.3		35.6	
Individuals main reason to have last test for HIV											
Hospitalization/surgical procedure	3.3	1.5 - 5.1		2.1	0.5 - 4.1		NA	NA		NA	
To apply for health insurance	1.8	0.5 - 3.1		NA	NA		NA	NA		NA	
To apply for life insurance	4.1	2.1 - 6.0		7.9	4.7 - 11.2		NA	NA		NA	
For employment	1.8	0.5 - 3.1		3.4	1.2 - 5.6		NA	NA		NA	
To apply for a marriage license	7.9	5.2 - 10.5		NA	NA		NA	NA		NA	
For military induction or military service	1.8	0.5 - 3.1		NA	NA		NA	NA		NA	
For immigration	4.6	2.5 - 6.6		7.8	4.7 - 11.2		NA	NA		NA	
Just to find out if infected	21.8	17.7 - 25.9		13.3	9.2 - 17.3		NA	NA		NA	
Because of referral by a doctor	1.0	0.0 - 2.0		1.8	0.2 - 3.5		NA	NA		NA	
Because of pregnancy	17.0	13.3 - 20.7		18.6	13.9 - 23.3		NA	NA		NA	

	Santa Clara County						California (CDC)			National (CDC)
Health Indicator	BRFS 1997			BRFS 2000			BRFS 2000		BRFS 2000	BRFS 2000
	Percent	95 %CI		Percent	95 %CI		Percent	95 %CI	Percent	
Individuals main reason to have last test for HIV										
Referred by sex partner	-	NA		-	NA		NA	NA	NA	
Part of a blood donation process	9.6	6.7 - 12.6		1.9	0.2 - 3.5		NA	NA	NA	
For routine checkup	11.9	8.7 - 15.1		23.8	18.7 - 29.0		NA	NA	NA	
Because of occupational exposure	1.0	NA		2.6	0.7 - 4.6		NA	NA	NA	
Because of illness	0.8	NA		NA	NA		NA	NA	NA	
Because individual is at risk	0.3	NA		1.9	0.2 - 3.5		NA	NA	NA	
Other Reason	8.6	5.9 - 11.4		11.8	7.9 - 15.6		NA	NA	NA	
Where individuals last tested for HIV							NA	NA	NA	
Private Doctor	30.3	25.6 - 35.1		36.7	30.9 - 42.7		NA	NA	NA	
Blood bank, plasma center, Red Cross	2.0	0.5 - 3.4		NA	NA		NA	NA	NA	
Health department	1.7	0.3 - 3.0		4.0	1.5 - 6.2		NA	NA	NA	
AIDS clinic, counseling/testing site	2.2	0.7 - 3.8		1.9	0.3 - 3.6		NA	NA	NA	
Hospital, ER, outpatient clinic	26.4	21.8 - 31.0		17.0	12.5 - 21.6		NA	NA	NA	
Family planning clinic	5.6	3.2 - 8.0		7.1	3.9 - 10.1		NA	NA	NA	
Prenatal clinic/obstetrician's office	2.0	0.5 - 3.4		3.1	1.0 - 5.2		NA	NA	NA	
STD clinic	0.3	NA		-	NA		NA	NA	NA	
Community health clinic	10.4	7.2-13.6		6.6	0.7 - 4.7		NA	NA	NA	
Clinic run by employer	0.6	NA		3.5	1.2 - 5.7		NA	NA	NA	
Insurance company clinic	2.2	0.7-3.8		5.3	2.7 - 8.2		NA	NA	NA	

Health Indicator	Santa Clara County				California (CDC)		National (CDC)
	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000
	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent
Individuals main reason to have last test for HIV							
Other public clinic	2.5	0.9-3.2	NA	NA	NA	NA	NA
Drug treatment facility	0.6	N/A	NA	NA	NA	NA	NA
Military induction or military service site	1.4	0.2-2.6	NA	NA	NA	NA	NA
Immigration site	0.8	N/A	NA	NA	NA	NA	NA
At home, by nurse or health worker	1.1	N/A	2.9	1.0 - 5.2	NA	NA	NA
At home, using self-sampling kit	0.6	N/A	NA	NA	NA	NA	NA
In jail or prison	-	NA	NA	NA	NA	NA	NA
Somewhere else	5.6	3.2 - 8.0	6.7	3.6 - 9.6	NA	NA	NA
Individuals who received results of last HIV test							
Yes	88.8	85.5 - 92.0	91.1	87.8 - 94.7	90.4	87.2 - 93.5	86.4
Individuals who received counseling/talk with a health care professional about the results of their HIV test							
Yes	NA	NA	38.0	31.7 - 44.0	40.3	34.4 - 46.1	32.3
<b>Sexual Behavior</b>							
Individuals perception of using condoms to keep from getting HIV							
Very effective	49.0	45.5 - 52.5	53.4	50.8 - 55.9	NA	NA	NA
Somewhat effective	35.4	32.1 - 38.8	40.0	37.5 - 42.5	NA	NA	NA
Not at all effective	4.4	2.9 - 5.8	2.9	2.1 - 3.8	NA	NA	NA
Don't know how effective	8.1	6.2 - 10.0	2.9	2.0 - 3.7	NA	NA	NA
Don't know method	1.0	0.3 - 1.7	0.7	0.3 - 1.1	NA	NA	NA

Health Indicator	Santa Clara County				California (CDC)		National (CDC)
	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000
	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent
Individual has changed sexual behavior due to HIV knowledge, in past 12 months							
Yes	19.9	17.0 - 22.7	11.5	9.9 - 13.1	NA	NA	NA
<b>Firearms</b>							
Individual have firearms in or around the home							
Yes	19.5	17.4 - 21.7	16.0	14.5 - 17.4	NA	NA	NA
Individual's firearms are handguns, such as pistols or revolvers							
Yes	79.3	73.7 - 84.9	61.3	56.4 - 66.1	NA	NA	NA
Individual's firearms are long guns, such as rifles or shotguns							
Yes	67.7	61.9 - 73.6	74.6	70.4 - 79.1	NA	NA	NA
Individual has handguns in or around the home now loaded and not locked up							
Yes	20.6	12.9 - 28.2	12.4	8.3 - 16.8	NA	NA	NA
Main reason for having firearms in or around the home							
Safety/self-protection	40.0	32.9 - 47.6	23.9	19.4 - 28.2	NA	NA	NA
Requirement of employment for someone in the household	3.8	0.8 - 6.7	5.8	3.4 - 8.3	NA	NA	NA
Hunting	8.1	3.9 - 12.4	26.8	22.3 - 31.5	NA	NA	NA
Target practice/hobby/gun collector/recreation (other than hunting)	36.3	28.8 - 43.7	36.0	30.9 - 40.8	NA	NA	NA
Other	10.0	5.4 - 14.6	1.3	0.2 - 2.6	NA	NA	NA
Inherited, gift	-	NA	6.3	3.7 - 8.7	NA	NA	NA



Health Indicator	Santa Clara County				California (CDC)		National (CDC)
	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000
	Percent	95%CI	Percent	95%CI	Percent	95%CI	Percent
<b>Demographics</b>							
Gender							
Male	47.7	44.9 - 50.4	50.7	48.8 - 52.7	NA	NA	NA
Female	52.3	49.6 - 55.1	49.3	47.3 - 51.2	NA	NA	NA
Age Groups							
18-24	9.2	7.7 - 10.8	11.1	9.9 - 12.3	NA	NA	NA
25-34	26.1	23.7 - 28.5	20.0	18.4 - 21.5	NA	NA	NA
35-44	23.0	20.7 - 25.3	25.5	23.9 - 27.3	NA	NA	NA
45-54	16.5	14.5 - 18.5	18.6	17.1 - 20.1	NA	NA	NA
55-64	11.0	9.3 - 12.7	11.7	10.5 - 12.9	NA	NA	NA
65+	12.8	11.0 - 14.6	13.0	11.7 - 14.3	NA	NA	NA
Race Ethnicity							
White	59.7	57.0 - 62.3	51.9	50.0 - 53.8	NA	NA	NA
African/American	3.2	2.3 - 4.2	3.3	2.6 - 4.0	NA	NA	NA
Hispanic	17.5	15.4 - 19.5	21.2	19.7 - 22.8	NA	NA	NA
Asian/Other	16.3	14.3 - 18.3	23.5	21.9 - 25.2	NA	NA	NA
Number of children under age 18 living in household							
None	59.3	56.4 - 61.7	56.7	54.8 - 58.6	NA	NA	NA
1-2	32.6	30.1 - 35.2	23.1	31.3 - 35.0	NA	NA	NA
3-4	7.1	5.7 - 8.5	8.8	7.7 - 9.9	NA	NA	NA
5-7	1.2	0.6 - 1.8	1.3	0.9 - 1.8	NA	NA	NA

		Santa Clara County				California (CDC)			National (CDC)
Health Indicator	BRFS 1997		BRFS 2000		BRFS 2000		BRFS 2000		BRFS 2000
	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent	95 %CI	Percent
Highest grade or year of school individual has completed									
	Eighth grade or less	4.8	3.7 - 6.0	3.9	3.1 - 4.6	NA	NA	NA	NA
	Some high school	5.2	4.0 - 6.4	5.1	4.3 - 6.0	NA	NA	NA	NA
	Grade 12 or GED	19.2	17.1 - 21.4	20.5	19.0 - 22.1	NA	NA	NA	NA
	Some technical school	0.4	0.0 - 0.7	0.8	0.5 - 1.1	NA	NA	NA	NA
	Technical school graduate	1.6	0.9 - 2.3	1.5	1.0 - 2.0	NA	NA	NA	NA
	Some college	22.0	19.8 - 24.3	20.9	19.3 - 22.5	NA	NA	NA	NA
	College graduate	26.9	24.5 - 29.3	28.0	26.3 - 29.8	NA	NA	NA	NA
	Post graduate or professional degree	19.2	17.1 - 21.4	19.3	17.7 - 20.8	NA	NA	NA	NA
	Individual's employment status								
Employed for wages	61.4	58.7 - 64.0	60.1	58.2 - 62.0	NA	NA	NA	NA	
Self-employed	9.9	8.2 - 11.5	7.1	6.1 - 8.1	NA	NA	NA	NA	
Out of work for more than 1 year	1.7	1.0 - 2.4	1.4	0.9 - 1.8	NA	NA	NA	NA	
Out of work for less than 1 year	2.3	1.5 - 3.1	2.5	1.9 - 3.1	NA	NA	NA	NA	
Homemaker	7.0	5.6 - 8.4	9.0	7.9 - 10.1	NA	NA	NA	NA	
Student	2.8	1.9 - 3.8	3.5	2.7 - 4.2	NA	NA	NA	NA	
Retired	13.0	11.2 - 14.8	13.4	12.1 - 14.8	NA	NA	NA	NA	
Unable to work	1.5	0.8 - 2.1	2.4	1.8 - 2.9	NA	NA	NA	NA	
Other	0.5	0.1 - 0.8	0.6	0.3 - 0.9	NA	NA	NA	NA	
5-7	1.2	0.6 - 1.8	1.3	0.9 - 1.8	NA	NA	NA	NA	

Health Indicator	Santa Clara County						California (CDC)		National (CDC)	
	BRFS 1997			BRFS 2000			BRFS 2000		BRFS 2000	
	Percent	95 %CI		Percent	95 %CI		Percent	95 %CI	Percent	
Individual's annual household income from all sources										
< \$10,000	7.4	5.9 - 8.9		4.7	3.8 - 5.6		NA	NA	NA	
\$10,000 - \$15,000	5.6	4.2 - 6.9		5.2	4.3 - 6.1		NA	NA	NA	
\$15,000 - \$20,000	4.4	3.3 - 5.6		4.0	3.2 - 4.8		NA	NA	NA	
\$20,000 - \$25,000	5.0	3.7 - 6.2		4.8	3.9 - 5.7		NA	NA	NA	
\$25,000 - \$35,000	10.9	9.1 - 12.7		8.4	7.2 - 9.5		NA	NA	NA	
\$35,000 - \$50,000	16.0	12.3 - 16.1		12.9	11.5 - 14.3		NA	NA	NA	
\$50,000 - \$75,000	21.3	16.7 - 21.0		17.6	16.0 - 19.1		NA	NA	NA	
> \$75,000	29.4	26.7 - 32.0		42.4	40.4 - 44.5		NA	NA	NA	

## Notes

Certain health indicators that were covered in this report were not included in this matrix due to lack of comparable questions asked from 1997 to 2000 or lack of standards available for which to compare against.

In this matrix, NA represents lack of data availability, data not being statistically significant to report, or the question was not asked during that survey year.

## public health department program descriptions

### **Adolescent Family Life Program (AFLP)**

The Adolescent Family Life Program provides case-management services to help pregnant and/or parenting teens with the challenging tasks of parenthood. AFLP services are free to residents of Santa Clara County, specifically pregnant or parenting females 18 years of age or younger, and teen fathers and/or fathers-to-be who are 20 years or younger.

### **Adolescent Pregnancy Prevention Network (APPN)**

The Adolescent Pregnancy Prevention Network (APPN) is a public-private sector coalition with over 80 partners throughout Santa Clara County. There are a total of eight workgroups: 1) the Executive Council/Co-chairs group providing oversight; 2) one countywide group, Public Awareness, Education and Policy; and 3) six community-based initiatives including four workgroups based in geographic areas where there are higher levels of teenage pregnancy (Downtown San Jose, Eastside San Jose, North County, and South County), and two countywide workgroups including Interfaith and the Male Involvement Program. The Adolescent Pregnancy Prevention Network supports collaborative prevention efforts and systemic strategies to address the multiple factors associated with adolescent pregnancy. These efforts include primary and secondary prevention programs with youth, community forums that provide a venue for educating the public about teen pregnancy, and media campaigns.

### **Adolescent Sibling Pregnancy Prevention Program (Sibling Program)**

The Adolescent Sibling Pregnancy Prevention Program is a pregnancy prevention program that provides individual and group support, health education and activities for youth ages 11-14 that have a sibling in the AFLP or CAL-Learn program. Adolescent Sibling Pregnancy Prevention staff provide case management and health education services to youth at risk for early pregnancy. The program is a component of and modeled after the state's Adolescent Sibling Pregnancy Prevention Program (ASPPP) developed and funded by the California Department of Health Services, Maternal and Child Health Branch.

### **Asthma Case Management**

The Asthma Case Management project, coordinated through the Community Based Services Division of the Public Health Department in partnership with several agencies, provides health services to asthmatic children from low-income families who are uninsured or underinsured in Santa Clara County.

### **Black Infant Health (BIH)**

The Black Infant Health Program, under the Maternal, Child and Adolescent Health (MCAH) unit, provides culturally-sensitive case management, outreach and follow-up support, and empowerment services to African American women who are pregnant and/or parenting a child under two years of age.

**Breastfeeding Promotion Project**

The Breastfeeding Promotion Project, coordinated through the Maternal Child Adolescent (MCAH) Unit, provides support, information and resources to promote breastfeeding in Santa Clara County. Services include providing community breastfeeding resources, education, and referral information.

**Burbank Project**

The Burbank Project addresses public health needs in the Burbank area in Santa Clara County, an underserved, high-risk community with multiple health and safety issues. The Public Health Department has partnered with residents, community based organizations and other providers to identify and address the health and safety issues impacting the area.

**California Children's Services (CCS) and Therapy Program**

The California Children's Services Program is a state and federally mandated program that pays for medical diagnosis, treatment, therapy, and case management for (financially, residentially, and medically) eligible children with physical disabilities and special health care needs. In addition to coordinating and authorizing specialized medical care, CCS also provides diagnostic evaluations, rehabilitation, physical therapy, and medical case management for clients. Partnering providers receive assistance with CCS Panel applications, technical assistance and consultation, service authorization, claims approval and processing, and information on client eligibility status.

**CAL-Learn Program**

The CAL-Learn program is for pregnant and/or parenting teens who are recipients of CalWORKS. It provides support services and cash incentives to assist teens in completing their education. Cal-Learn services are free to residents in Santa Clara County, specifically pregnant or parenting females 18 years or younger, and teen fathers and/or fathers-to-be who are 20 years or younger.

**Child Care Health Consultation Program**

Through collaboration with child care, early childhood development, safety, and health professionals from county agencies, Child Care Health Consultation Program offers health consultation, access to community resources, and advice services to clients. In addition, the program offers various resources to child care providers.

**Child Death Review Team**

The Child Death Review Team is part of the Maternal, Child, and Adolescent Health (MCAH) unit, and is a multi-disciplinary collaborative of providers from different agencies. The team reviews all deaths of children under 18 years of age who have died suddenly and unexpectedly in Santa Clara County to gain a better understanding of the causes of death and to implement strategies that prevent child fatalities. The Child Death Review Team also provides consultation to the Coroner's Office on issues related to specific child death cases.

### **Child Health & Disability Prevention (CHDP) Program**

The CHDP Program provides comprehensive health exams and immunizations for children with Medi-Cal or children from low-income families. A network of 106 providers, including private, community clinics, school-based health centers, and Valley Health and Hospital Ambulatory Care Clinics, perform CHDP health exams for eligible residents in Santa Clara County. Primary activities include outreach, health education, provider relations, case coordination and quality assurance.

### **Childhood Lead Poisoning Prevention (CLPPP)**

The CLPPP provides case management services to children with elevated blood lead levels in an attempt to determine the source of lead and prevent further exposure. Staff provide outreach and education to communities at-risk for lead poisoning, and offers informational presentations to medical providers.

### **Community Health Council**

The Community Health Council is a committee of residents in the South County region. Lead by the Public Health Department, the responsibilities of the Community Health Council are to increase health care enrollment of South Santa Clara County residents, reconnect health care consumers to the Santa Clara County Health and Hospital System, develop and implement educational presentations on accessing health care to community residents in their homes, and establish linkages with area medical providers and community based clinics.

### **Comprehensive Perinatal Services Program (CPSP)**

The Comprehensive Perinatal Services Program (CPSP), coordinated through the Maternal Child Adolescent Health (MCAH) unit, is a Medi-Cal funded program that provides additional health, nutrition, and psychosocial education and support for pregnant, prenatal, and postpartum women through Medi-Cal approved health providers. Eligible clients include Medi-Cal eligible pregnancy and postpartum women. CPSP staff supply providers with the Initial Combined Assessment and Individualized Care Plan protocol and assessment tools for nutrition, health education, psychosocial and individual care plans for clients.

### **Crane Center**

The Crane Center is a clinic that provides HIV and other STD testing, counseling, and referral services to clients.

### **Diabetes Case Management**

The Diabetes Case Management project, coordinated through the Community Based Services Division of the Public Health Department, provides case management services and tracking of newly diagnosed low-income adults and adolescent diabetics who are uninsured or underinsured in specific regions throughout Santa Clara County where diabetes has the greatest prevalence.

**Disease Prevention & Control**

The Disease Prevention and Control Program is responsible for the surveillance and reporting of 83 different reportable diseases and conditions, case investigation, planning and implementation of disease education and prevention programs, public health laboratory support, and addressing any circumstances or issues related to communicable disease and the public's health.

**Emergency Medical Services (EMS) Agency**

The Emergency Medical Services (EMS) Agency is responsible for 24-hour oversight, evaluation and improvement of the EMS/Trauma System in Santa Clara County. The EMS Agency coordinates all emergency medical activities with all system participants, including the fire departments, emergency medical service providers, dispatchers, air medical providers, law enforcement agencies, and hospital emergency response staff.

**Families Project**

The Families Project is an intensive home visiting model that uses a paraprofessional (Public Health Assistant) paired with a Public Health Nurse to provide services to pregnant and parenting families.

**Fetal Infant Mortality Review (FIMR)**

The Fetal Infant Mortality Review (FIMR) is a project established to identify and examine factors that contribute to fetal and infant death through a systematic evaluation of individual cases. A multi-disciplinary team of health professionals reviews cases, identifies preventable factors/barriers to care/systems issues, develops recommendations, and assists in implementing recommendations which can improve services for women and children.

**First Time Mom's Project**

Coordinated through the Regional Community Based Service Offices, the First Time Mom's Project is a collaborative of Santa Clara, Santa Cruz, and Monterey counties working together to identify risk factors and prevent health problems associated with child abuse and neglect. This program is a replication of the research-based nurse home visiting program by David Olds and Associates and the University of Colorado. Target population includes low income, first time pregnant mothers before 28 weeks of gestation. Services are provided up to an infant's second birthday. The program focuses on five functioning domains: personal health, environmental health, maternal role development, maternal life-course development, and family/friend support. Program goals are to improve the outcomes of pregnancy, support child health and development, and foster economic self-sufficiency early in the life cycle.

**Foster Care Program**

The Foster Care Program's nursing team provides intensive coordination of services for children in foster care. The team coordinates with medical providers, gathers medical histories, updates social workers on medical and developmental problems, refers to community resources, and supports and educates foster parents regarding the medical needs of children in their care.

**HIV/AIDS Prevention & Control**

The HIV/AIDS Prevention and Control Program (HAP) provides a comprehensive spectrum of services targeting people at high-risk, infected, and/or affected by HIV/AIDS. The program's objectives are twofold: to eliminate further transmission of HIV in Santa Clara County and to improve the health status and quality of life of residents living with HIV or AIDS. HAP also coordinates the Crane Center, Needle Exchange Program, and the NIGHT Program Mobile Van.

**Immunization Program (IZ) (Education Planning and Clinics)**

The Immunization Program and clinics have the goal to ensure that all people of Santa Clara County are protected from illness, disability and death caused by vaccine preventable diseases. The program provides free or low cost immunizations, vaccinations, and education. IZ clinical services include free or low cost immunizations for children from birth to 18 years of age (Fast Track clinics), consultation, and administration of recommended vaccinations for travel (Travel clinic), low-cost flu vaccination for seniors and other high-risk groups (Flu clinics), and vaccine monitoring. In addition, the IZ program coordinates the Perinatal Hepatitis B Project.

**Immunization Registry**

The Immunization Registry Information System (IRIS) is a computer automated information and reminder system. IRIS keeps a record of immunizations (shots) for all children who are enrolled. The purpose of the Immunization Registry is to make each child's immunization record available to the child's health care provider and to remind parents when their child's immunizations are due or overdue. The goal of IRIS is to prevent over-immunization or under-immunization of children.

**Lenzen Gardens**

Lenzen Gardens, a housing unit for the elderly and disabled residents, is also a Public Health Department project focusing on adult senior health. Generalist public health nurses (PHNs) visit clients at the Lenzen Gardens senior housing unit to assess health care needs and link clients to appropriate medical care services.

**Maternal Child Adolescent Health (MCAH) Outreach**

MCAH Outreach promotes early access to health care services for pregnant and parenting women and their children through canvassing, presentations, and community agency collaborations.

**Medically Vulnerable Infant Program (MVIP) – aka “Pasitos/Little Steps”.** The Medically Vulnerable Infant Program is a case management program that targets medically vulnerable infants and their parents or caregivers. Infants born premature or are high-risk for developmental, cognitive, and/or language delays at the Valley Medical Center Neonatal Infant Care Unit (NICU) are referred to MVIP.



**Needle Exchange Program**

The Needle Exchange Program focuses on providing clean needles to substance abusers who are at risk for contracting HIV and AIDS. The program also provides education and referrals to appropriate resources and agencies.

**NIGHT Program Mobile Van**

The NIGHT Program Mobile Van, is a neighborhood intervention project geared towards testing high-risk populations to reduce the incidence and prevalence of HIV and other STDs in Santa Clara County. Intervention services include case management, outreach, testing, education, counseling, referrals, and linkages to other services and organizations.

**North County Regional Cities**

The North County Regional Cities project focuses on increasing the capacity of the northern Santa Clara County community to respond to complex health problems in partnership with the Public Health Department and establish proactive prevention strategies. Activities include networking with North County health providers and service agencies to identify community health needs and resources, and serving as Public Health “ambassadors” when educating city and community leaders.

**Perinatal Hepatitis B**

The Perinatal Hepatitis B program provides case management services to high-risk groups and individuals and their families diagnosed with Hepatitis B. Referrals and linkages to other resources are also provided. The goal of this program is to prevent hepatitis B transmission to infants and household contacts of hepatitis B surface antigen-positive women. Activities include community-based screening of all pregnant women for hepatitis B surface antigen, provision of appropriate immunizations for infants and household contacts, and education to providers and the public concerning perinatally acquired hepatitis B and prevention.

**Perinatal Substance Abuse Team**

The Perinatal Substance Abuse Team is a multi-systems, multi-agency approach to collaborative case management and home-based visitation for substance abusing pregnant and early parenting women and their children. The program’s goals are to promote healthy prenatal behaviors of expectant mothers, provide support for healthy parent-infant/toddler relationships, and establish enhanced linkages of families to health and human services.

**Project LEAN**

Project LEAN promotes healthy lifestyles by creating an environment that enables consumers to choose healthy foods and increase their physical activity levels. This is accomplished through active public-private partnerships, which provide information that make healthy foods and physical activity options accessible and visible throughout the state.

**Public Health Laboratory**

Charged with providing laboratory support for the programs and activities of the Public Health Department and the community, the Santa Clara County Public Health Laboratory provides reference testing, consultation and training. The Laboratory is a full service microbiology laboratory that provides clinical and reference testing in the areas of virology, mycology, bacteriology, serology, and parasitology. The environmental laboratory offers water testing to detect bacterial contamination and food testing when a food is suspected to be the source of a food borne outbreak.

**Public Health Pharmacy**

The Public Health Pharmacy's goal is to provide the highest level of pharmaceutical care consistent with community standards and client needs. Activities include providing pharmacy services and drug information to clients, prescription compounding, participation in HIV/AIDS investigational drug studies and AIDS drug assistance programs, participation in pediatric vaccine programs, special compliance packaging for TB medications, and provision of medical supplies and drug information to PHD professionals.

**Public Health Regional Neighborhood Van Services (Mobile Van)**

Public Health Regional Neighborhood Van Services provide specific preventative public health services and outreach to underserved populations in high-risk neighborhoods by improving access to health care and promoting wellness. Two small vans have been used by staff in PH Regions 2 & 6 to transport health education materials, screening equipment, and staff to community sites on a monthly basis and to one-time community events.

**STD Prevention & Control**

The STD Prevention and Control Program works to reduce transmission of sexually transmitted diseases and promote sexual health. Services include STD surveillance, community health education, community-based outreach and intervention, partner services, and technical assistance.

**Sudden Infant Death Syndrome (SIDS) Program**

The SIDS program provides support for families who have lost a child to SIDS. Services include case management, counseling, and health education.

**Tobacco Prevention and Education Program (TPEP)**

The Tobacco Prevention & Education Program (TPEP) works to reduce tobacco use in Santa Clara County through health education, prevention, and advocacy activities. TPEP focuses on promotion of tobacco use cessation services, reducing exposure to secondhand smoke, reducing access to tobacco products by minors, and countering the tobacco industry. The program receives direction through its community partners, which include the Tobacco Control Coalition of Santa Clara County, Coalition Against Teen Tobacco (CATT), schools, and community-based organizations.

**Traffic Safe Communities Network (TSCN)**

The Traffic Safe Communities Network (TSCN), a countywide coalition of professionals and community members, aims to prevent and control traffic-related fatalities and injuries, as well as save health care and property costs for five priority areas: Alcohol and impaired driving, assessment/data, bicycle and pedestrian safety, child passenger safety, and red light running.

**Tuberculosis (TB) Prevention and Control Program**

The mission of the Tuberculosis (TB) Prevention and Control Program is to prevent the development and spread of tuberculosis among Santa Clara County residents. Diagnostic and treatment services are offered to patients, in addition to health information and resources. The program also works with health care providers and offers consultation regarding treatment issues or resource information, in-service training and resource materials on TB, contact investigation for TB cases, and opportunity to participate in the Tuberculosis Prevention Partnership (TPP) coalition.

**Violence Prevention Program (VPP)**

The Violence Prevention Program is a community oriented violence prevention coalition responsible for the implementation of the Board of Supervisors-approved Violence Prevention Action Plan (VPAP) and the Peace Builders program, a school-based violence prevention program. The VPAP uses a comprehensive, data-driven, research-based approach to preventing violence, as well as psychological and physical abuse.

**Vital Records**

The Vital Records & Registration Program provides certified copies of birth and death certificates from Santa Clara County. After the records are registered, a file copy is kept on file for the last two years plus the current year.

**Women, Infant, and Children (WIC)**

The Women, Infants, and Children (WIC) program was created in 1972 as part of the Child Nutrition Act to provide supplemental foods, nutrition education, breastfeeding support, and referrals to healthcare for low-income women, infants and children.

## population projections for Santa Clara County, 2000

**Percentages of Residents by Gender, Age, and Race**

Gender/Age	White %	Hispanic %	Black %	Asian/ Other %
Male 18-24	2.15	1.72	0.23	1.58
Male 25-34	4.09	3.18	0.44	2.83
Male 35-44 or Male refused age	6.88	2.93	0.54	3.25
Male 45-54	5.36	1.60	0.36	2.09
Male 55-64	3.72	0.88	0.19	1.03
Male 65+	3.71	0.83	0.10	1.03
Female 18-24	2.05	1.58	0.23	1.49
Female 25-34	3.84	2.56	0.39	2.63
Female 35-44 or Female refused age	6.01	2.44	0.46	3.06
Female 45-54	5.23	1.53	0.31	2.09
Female 55-64	3.87	0.91	0.18	1.07
Female 65+	4.89	1.06	0.12	1.30
	51.79	21.21	3.54	23.46

Source: California Department of Finance, 2000

the 1990s, the number of people in the UK who are aged 65 and over has increased by 1.5 million (1990–2000) and is projected to increase by a further 1.5 million by 2020 (Office for National Statistics, 2001). The number of people aged 65 and over in the UK is projected to increase from 10.5 million in 1990 to 12.5 million in 2020, with the number of people aged 75 and over increasing from 4.5 million to 6.5 million in the same period (Office for National Statistics, 2001).

There is a growing awareness of the need to develop strategies to meet the needs of the ageing population. The Department of Health (2000) has identified the need to develop a 'new paradigm' for health care, which is based on the principles of prevention, promotion, and primary care. This paradigm is based on the idea of 'active ageing', which is the process of maintaining and enhancing the functional ability of older people to live independently and participate in society (World Health Organization, 1999).

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